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ABSTRACT

This final report describes the inservice training on the problems of learning disabled college students which was provided to community college faculty and support staff in New York City in December 1989 and March 1990. Participants included coordinators for disabled students, program coordinators, instructors, and tutors. The inservice training had two phases. The first phase involved classroom based activities pertaining to the identification of signs of learning disabilities and writing deficits. Participants administered a questionnaire that screened for symptoms of learning disabilities, and collected writing samples from their students. This material formed the basis of the hands-on workshops at the 2-day conferences. Conference presentations and workshops addressed the following areas: (1) writing skills instruction and the learning disabled community college student; (2) specific instructional strategies to help learning disabled students develop writing skills; (3) a diagnostic-prescriptive approach to writing problems in learning disabled students; (4) characteristics of learning disabled individuals with writing problems; (5) a three-tier approach for helping dysgraphic writers; and (6) individualized remedial approaches. Video materials were also developed. Much of the document consists of an appendix which contains the academic questionnaire, conference agendas, breakdown of conference participants by college, and evaluation summaries. A full conference proceedings with summaries of 16 presentations is also appended. Includes over 100 references. (DB)

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INSERVICE TRAINING IN THE DIAGNOSTIC-PRESCRIPTIVE APPROACH TO WRITING DEFICITS IN LEARNING DISABLED AND OTHER SEVERELY ACADEMICALLY DEFICIENT STUDENTS

Final Report

Prepared by

Dolores Perin, Ph.D.
Project Director

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This project was performed in cooperation with
The Office of Occupational & Continuing Education
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CASE #11-90
December 1990

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EC

TABLE OF CONTENTS

Page

ABSTRACT i

ACKNOWLEDGEMENTS iii

Project Accomplishments 1

Advisors to the Project 2

Inservice Training 2

Transfer and Dissemination of Video Materials 4

Dissemination of Inservice Conference Proceedings 5

APPENDIX 7

- Academic Questionnaire
- Conference Agendas
- Breakdown of Conference Participants by College
- List of Conference Participants
- Summaries of Conference Presentations
- Evaluation Summaries
- "Instructing Students with Learning Disabilities: Guidelines for Community College Faculty and Support Staff" (Conference Proceedings)

INSERVICE TRAINING IN THE DIAGNOSTIC-PRESCRIPTIVE APPROACH TO WRITING DEFICITS IN LEARNING DISABLED AND OTHER SEVERELY ACADEMICALLY DEFICIENT STUDENTS

VEA Grant Award #152-90-1923

Principal Investigator: Bert Flugman, Ph.D.
Project Co-Directors: Dolores Perin, Ph.D., David Katz, Ph.D.

ABSTRACT

Writing problems are probably the most serious of all the difficulties faced by learning disabled students and others with severe academic impairments. Inservice training was provided on this topic to CUNY and SUNY community college faculty and support staff in the New York City metropolitan area. Participants included coordinators for disabled students, program coordinators, instructors and tutors.

The inservice training had two phases. The first phase involved classroom-based activities pertaining to the identification of signs of learning disabilities and writing deficits. Participants administered a questionnaire that screened for symptoms of learning disabilities, and collected writing samples from their students. This material formed the basis of hands-on workshops at the two full-day conferences which formed the second phase of the training.

The conferences consisted of the following presentations and workshops:

- Writing Skills Instruction and the Learning Disabled Community College Student: Research and Practice (presented by Dr. Susan Vogel, Eastern Michigan University)
- Specific Instructional Strategies to Help Learning Disabled Students Develop Writing Skills (presented by Patricia Anderson, M.S., University of Connecticut)
- A Diagnostic-Prescriptive Approach to Writing Problems in Learning Disabled Students: Error Analysis and Intervention (presented by Dr. Catherine Corbo, Brookdale Community College, New Jersey)
- Do Learning Disabled Individuals with Writing Problems Differ from Other Poor Writers? (presented by Dr. Anna Gajar, Pennsylvania State University)
- A Three-Tier Approach for Helping Dysgraphic Writers (presented by Dr. Abraham Kuppersmith, Borough of Manhattan Community College)

- Individualized Remedial Approaches (presented by Patricia Anderson, M.S., University of Connecticut, and Dr. Dolores Perin, CUNY Graduate School)

In addition to the inservice training, videotape materials developed under VEA Grant Awards 153-88-7173 and 152-89-5153 were disseminated. Sets of the materials were transferred to the coordinators for disabled students on each CUNY and SUNY community college in New York State. In addition, the materials were disseminated in conference presentations, and announced in several newsletters. As a result, further sets of materials were provided on a cost-recovery basis to community college faculty and support staff across the country and in Canada.

Also, a proceedings of the inservice training conferences conducted under the current project and two previous projects was prepared. This document will serve as a resource for on-campus staff development and will be given to the coordinators for disabled students on each CUNY and SUNY community college campus.

ACKNOWLEDGEMENTS

We are grateful to all the people who supported and assisted in project activities. In particular, we appreciate the support given by Mike Van Ryn, Assistant Commissioner for Higher Educational Services, Charles Graber, Chief of the Bureau of Grants Administration, and Michael King, Bureau of Postsecondary Grants Administration, New York State Education Department.

We thank the CUNY Committee for Disabled Students for their ongoing support in both the planning and implementation of the inservice activities. We appreciate the assistance given by the staff of Educational Resources at the CUNY Graduate School, especially Foster Henry, for their help in preparing the videotape materials for distribution.

Dr. Bert Flugman and Dr. David Katz's involvement and participation in all project activities is deeply appreciated.

We thank Melanie Bentley and Eileen Romano, who provided overall administrative assistance to the project and did the word processing and duplicating.

FINAL REPORT

INSERVICE TRAINING IN THE DIAGNOSTIC-PRESCRIPTIVE APPROACH TO WRITING DEFICITS IN LEARNING DISABLED AND OTHER SEVERELY ACADEMICALLY DEFICIENT STUDENTS

Project Accomplishments

All major objectives of the inservice training project funded under VEA Grant Award #152-90-1923 were accomplished, as follows:

a) provision of inservice training in learning disabilities to faculty, coordinators for disabled students, and support staff of the CUNY and SUNY community colleges in the New York City metropolitan area. The specific theme of inservice training was instructional strategies to address the writing deficits of learning disabled students and others with serious acadmic deficits. The inservice training had two phases: classroom-based activities pertaining to the identification of signs of learning disabilities and writing deficits, and two full-day inservice training conferences.

b) transfer and dissemination of videotape materials developed under VEA Grant Awards 153-88-7173 and 152-89-5153. Sets of the materials were provided to the coordinators for disabled students on each CUNY and SUNY community college in New York State. In addition, the materials were disseminated in conference presentations, and were announced in several newsletters. As a result, further sets of materials were provided on a cost-recovery basis to community college faculty and support staff across the country and in Canada.

In addition, a proceedings of the inservice training conferences conducted under the current project and two previous projects was prepared. It is planned that this document will be provided to the coordinators for disabled students on each CUNY and SUNY community college campus in New York State by January 1991, and to participants of inservice training conferences being conducted under the current VEA project. The document will also be made available on a cost-recovery basis to other interested individuals.

Each of the accomplishments just summarized will be addressed in a section below.

Advisors to the Project

An advisory committee was formed consisting of the following individuals:

Dr. Loring Brinckerhoff, Project Coordinator, Northeast Technical Center for Learning Disability and College Programming, University of Connecticut.

Professor Patricia Brown-Height, English Department, LaGuardia Community College

Georgeann du Chossois, Coordinator, Access to Learning, New York University

Craig Michaels, Senior Coordinator of Special Rehabilitation Projects, Human Resource Center, Albertson, New York

Professor Elliot Rosman, Co-Chair, CUNY Committee for Disabled Students, and Coordinator for Disabled Students at Queensborough Community College

The CUNY Committee for Disabled Students and the advisors helped to refine concepts for the development of the pre-conference, classroom-based activities, and the inservice conferences. Project staff attended an executive meeting of the CUNY Committee for Disabled Students to discuss the plans for training. As in previous projects, the members of the committee provided helpful suggestions and feedback.

Inservice Training

Classroom-based activities. Individuals who registered for the full-day inservice training conferences (described below) were invited to participate in pre-conference training activities. Those expressing an interest were asked to administer a questionnaire developed by project staff that asked for their students' self-reports on problems associated with learning disabilities. The questionnaire, which may be found in the Appendix, was considered a tool for the identification of students who experienced symptoms of learning disabilities.

The inservice participants were asked to provide completed questionnaires to project staff, along with writing samples and consent forms, for all students who took part in the exercise. The questionnaires and writing samples provided the basis for hands-on, experiential workshops conducted as part of the two full-day inservice conferences. In addition, the questionnaire responses and writing samples were analyzed by project staff.

Full-day inservice conferences. The conferences were given at the CUNY Graduate School on December 8, 1989 and March 30, 1990. Both conferences consisted of presentations and workshops on writing skills deficiencies in learning disabled college students. Each conference included a keynote presentation by a nationally-known expert in the field of learning disabilities at the college level, a presentation on specific instructional strategies, and a hands-on workshop based on the writing samples and questionnaires, as described above. A summary of the analysis of the questionnaires and writing samples was presented as an introduction to the hands-on workshop at the March conference. Conference agendas, summaries of the presentations made at both conferences, and a description of the hands-on workshops, are provided in the Appendix. Resource folders containing current articles and other information pertaining to the diagnosis and remediation of writing skills difficulties in learning disabled college students were handed out to participants.

At the March conference, an informal lunch-time session was held based on the videotape materials produced in previous projects, described below.

For the first conference, 67 individuals pre-registered and 55 attended, 46 of whom were community college faculty and staff. For the second conference, 73 pre-registered and 47 attended, 40 of whom were from community colleges. Lists of the community college participants may be found in the Appendix.

At the end of each conference, participants were asked to complete evaluation forms anonymously. Summaries of the evaluation ratings, answers to open-ended questions and demographic information are provided in the Appendix.

Examination of the evaluation summaries shows that the conferences were perceived as helpful by the large majority of participants. The presentations tended to receive high ratings on questions concerning the understanding of concepts and the application to the classroom of instructional strategies described. Participants listed many ideas they considered useful, and also had recommendations concerning further information they felt they needed.

Transfer and Dissemination of Videotape Materials

A videotape package consisting of two videotapes and a viewing guide was prepared in two previous projects. The videotapes contained eight sets of vignettes illustrating instructional strategies used in community colleges to teach learning disabled students. The viewing guide contains background information on learning disabilities, step-by-step instructions for using the videotapes in staff development workshops, and a list of articles pertaining to learning disabilities in adults. The materials were used in staff development activities conducted by IRDOE in previous projects. A set of materials was included with the Final Report for VEA 152-89-5153.

A set of materials was provided to the coordinator for disabled students in each CUNY and SUNY community college in New York State. An accompanying letter described the materials and suggested that an announcement be made on campus regarding the availability of the materials for staff development purposes.

All participants of the IRDOE learning disabilities inservice training conferences since 1986 received a letter informing them that the materials were now available on their campuses. The letters included the name of the disabled student coordinator and department on campus where the materials could be found. The participants were encouraged to use the materials in their own on-campus staff development activities.

The videotape materials were also made available on a cost-recovery basis. Announcements about the availability of the materials were made in the following newsletters:

> "Information from HEATH," of the National Clearinghouse on Postsecondary Education for Individuals with Handicaps (circulated to 16-17,000 people nationally)
>
> "Postsecondary LD Network News," of the LD College Unit, University of Connecticut (circulated to 2,500 people nationally and in Canada)
>
> "Resource" of the Office of Academic Affairs, CUNY (circulated to 3,000 CUNY faculty and staff).

Workshops based on the videotape materials were conducted by Dolores Perin at the following conferences:

> CUNY Association of Reading Educators (CARE), New York City, April 1990.

Association on Handicapped Student Service Programs in Postsecondary Education (AHSSPPE), Nashville, TN, August 1990.

In addition, the materials were described in presentations made by Dolores Perin at the following conferences:

CUNY Association of Writing Supervisors (CAWS), New York City, October 1989.

American Vocational Association, Orlando, FL, December 1989.

As a result of the newsletter announcements and conference presentations, 90 sets of materials were provided on a cost-recovery basis to individuals across the country and in Canada. At the time of writing, orders are still being received.

Dissemination of Inservice Conference Proceedings

The presentations made at IRDOE's inservice conference on learning disabilities beginning in 1986 were summarized by project staff and have been combined to form a conference proceedings. Entitled "Instructing Students with Learning Disabilities: Guidelines for Community College Faculty and Support Staff," the document will be sent to the coordinators for disabled students on the CUNY and SUNY community college campuses in New York State. In addition, it will be handed out to participants of the two inservice conferences being conducted by IRDOE under the current VEA project.

A copy of the proceedings may be found in the Appendix.

APPENDIX

Questionnaire used for pre-conference classroom-based activity.

ACADEMIC QUESTIONNAIRE

Your initials ________ Age _____ Sex M ____ F ____ Today's date ____________

College______________________________ Course title ______________________

Instructor's name ____

Year left high school _______________ I have a high school diploma ____ GED ____

Do the following statements apply to you? Answer yes or no below. Please be as honest as you can - your answer will be kept confidential.

1. Overall, I enjoy being a college student.

_____ Yes _____ No

2. I get good grades on compositions and essays.

_____ Yes _____ No

3. As a child, I took longer to learn to read than the others.

_____ Yes _____ No

4. I think my spelling needs improvement.

_____ Yes _____ No

5. I enjoy attending sports events or going to the movies.

_____ Yes _____ No

6. I was in special education classes or went to a resource room in high school.

_____ Yes _____ No

7. At some time in the past, I was tested and told I have a learning disability or special learning needs.

_____ Yes _____ No

8. I am good at art or music, such as drawing or playing an instrument.

_____ Yes _____ No

9. I got many D's and F's in high school.

_____ Yes _____ No

10. I enjoy meeting my friends and socializing with them.

_____ Yes _____ No

11. I belong to a college club.

_____ Yes _____ No

12. I express myself well when I speak but find it very hard to express what I mean when I write.

_____ Yes _____ No

13. It's hard for me to pay attention in class or during a test.

_____ Yes _____ No

14. I enjoy cooking or baking.

_____ Yes _____ No

15. I get high grades in some subjects but low grades in others.

_____ Yes _____ No

16. I often cannot find the right words to express a thought.

_____ Yes _____ No

17. Some days I do well in my classes but other days I forget everything I've learned - my grades go up and down.

_____ Yes _____ No

18. I enjoy taking care of small children.

_____ Yes _____ No

19. In high school, some people thought I was not trying, but I was trying as hard as I could.

_____ Yes _____ No

20. Teachers or others have told me that I am capable of earning higher grades.

_____ Yes _____ No

21. I often have trouble finding a place the first time.

_____ Yes _____ No

22. I speak English at home.

_____ Yes _____ No

Would you like to comment on any topic mentioned above? If so, please use the other side of this page.

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CONFERENCE ON WRITING SKILLS AND LEARNING DISABILITIES IN COMMUNITY COLLEGE STUDENTS

Date: Friday, December 8, 1989
Time: 8:30 a.m. to 3:00 p.m.
Place: CUNY Graduate School, 33 West 42nd Street, Room 1437, NYC 10036

AGENDA

8:30-9:00 a.m.	REGISTRATION AND COFFEE
9:00-9:15 a.m.	WELCOME AND INTRODUCTION
9:15-10:15 a.m.	**KEYNOTE PRESENTATION:** Writing Skills Instruction and the Learning Disabled Community College Student: Research and Practice. Dr. Susan Vogel, Chair, Special Education Department, Eastern Michigan University. Author of numerous publications concerning learning disabilities in college students, including *The College Student with a Learning Disability: A Handbook for College Learning Disabled Students, University Admissions Officers, Faculty and Administrators*, The Association for Children with Learning Disabilities, 1985.
10:30-11:45 a.m.	**WORKSHOP:** Specific Instructional Strategies to Help Learning Disabled Students Develop Writing Skills. Patricia Anderson, M.S., Northeast Technical Assistance Center for Learning Disability College Programming, University of Connecticut.
11:45 a.m.-1:00 a.m.	LUNCH
1:00-3:00 p.m.	**WORKSHOP:** A Diagnostic-Prescriptive Approach to Writing Problems in Learning Disabled Students: Error Analysis and Intervention. Dr. Catherine Corbo, Learning Disabilities Specialist, Brookdale Community College, Lyncroft, NJ.

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SECOND CONFERENCE ON WRITING SKILLS AND LEARNING DISABILITIES IN COMMUNITY COLLEGE STUDENTS

Date: Friday, March 30, 1990
Time: 8:30 a.m. to 3:00 p.m.
Place: CUNY Graduate School, 33 West 42nd Street, Room 207, NYC 10036

AGENDA

8:30-9:00 a.m.	REGISTRATION AND COFFEE
9:00-9:15 a.m.	WELCOME AND INTRODUCTION
9:15-10:45 a.m.	**KEYNOTE PRESENTATION:** Do Learning Disabled Individuals with Writing Problems Differ from Other Poor Writers? Dr. Anna Gajar, Department of Special Education, Penn State University
10:45-11:45 a.m.	**WORKSHOP:** A Three-Tier Approach for Helping Dysgraphic Writers. Dr. Abraham Kupersmith, Borough of Manhattan Community College, English Department
11:45 a.m.-1:00 p.m.	LUNCH (on your own)
1:00-3:00 p.m.	**WORKSHOP:** Individualized Remedial Approaches. (a) Results of analysis of academic questionnaires and writing samples submitted by Conference participants. Dr. Dolores Perin, CUNY Graduate School (b) Diagnostic-prescriptive approach based on selected writing samples. Patricia Anderson, M.S., University of Connecticut

Number of Participants Attending Conference on Writing Skills and Learning Disabilities in Community College Students
December 8, 1989
By Community College Affiliation

City University of New York (CUNY) Community Colleges	
Borough of Manhattan	8
Bronx	3
N.Y.C. Technical	2
Staten Island	3
Hostos	2
Kingsborough	6
LaGuardia	5
Queensborough	4

State University of New York (SUNY) Community Colleges	
Rockland	1
SUNY Farmingdale	3
Nassau	2
Westchester	2
Fashion Institute of Tech.	3
Suffolk (Brentwood)	2

Total number of Community College Participants: 46.

CONFERENCE ON
WRITING SKILLS AND LEARNING DISABILITIES
IN COMMUNITY COLLEGE STUDENTS
December 8, 1989

Participants

Name	Community College	Department
Emily Anderson	Borough of Manhattan	Social Science
Maryann Beach	N.Y.C. Technical	Educational Skills
Michele Brown	Hostos	Disabled Student Services
Pat Brown-Height	LaGuardia	English
Irene Buchman	Fashion Inst. of Tech.	Educational Skills
Tony Colarossi	Kingsborough	Special Services
Gail Glass	Kingsborough	Special Services
Selma Gortler	Kingsborough	Special Ed. Services
Joan Grier-Seals	Bronx	Student Support Services
Nancyann Grippo	Kingsborough	Special Services
Christina Grosso	SUNY Farmingdale	Disabled Student Services
Judy Halden-Sullivan	LaGuardia	English
Gretchen Haynes	Queensborough	Writing Center/English
Jenny Hwang	LaGuardia	Disabled Student Services
Martin Jacobs	Queensborough	Counseling
Roberta Jaskolski	Rockland	Developmental Studies
Joan Jeter	Borough of Manhattan	Co-op Education
Janis Jones	Borough of Manhattan	Developmental Skills/E.S.L.
Bette Kalash	Borough of Manhattan	Developmental Skills
Glenna Karyczak	Staten Island	English
Peter Keil	Staten Island	English
Elaine Krautman	Borough of Manhattan	Adult Basic Education
Arthur Kupersmith	Borough of Manhattan	English
Jeffrey Kurnit	Queensborough	Basic Ed. Skills
Mati Kuuskmae	Suffolk	English
Michele Lee	Queensborough	Disabled Student Services
Victor Margolis	Nassau	Student Support Services
Myrna Pagan-Ubides	Bronx	Student Support Services

Name	Community College	Department
Gerald F. Phelan	SUNY Farmingdale	English, Humanities
Susan Price	Borough of Manhattan	Developmental Skills
Suzanne Putnam	Westchester	College Learning Disabilities
Statton Ray	Fashion Inst. of Tech.	E.S.L. Skills
Fran Reiser	Suffolk	Disabled Student Services
Carol Rivera-Kron	LaGuardia	Humanities, Speech
Charlotte Rubin	N.Y.C. Technical	Student Support Services
Estelle Schneider	LaGuardia	Communication Skills
Meralee Silverman	Westchester	Reading, Study Skills
Golda Solomon	Borough of Manhattan	Speech
Arleen Stapleton	Kingsborough	Special Services
Joan Stern	Fashion Inst. of Tech.	English
Julio Sterling	Hostos	Disabled Student Services
Joe Todaro	Bronx	Special Ed. Services
Leona Waxman	Kingsborough	Special Services
Diana Wienbroer	Nassau	English
Gail Wood	Staten Island	English
Rayna Zwerlein	SUNY Farmingdale	Developmental Studies

Number of Participants Attending Conference on Writing Skills and Learning Disabilities in Community College Students
March 30, 1990
By Community College Affiliation

City University of New York (CUNY) Community Colleges		State University of New York (SUNY) Community Colleges	
Borough of Manhattan	4	Rockland	5
Bronx	5	SUNY Farmingdale	4
N.Y.C. Technical	2	Nassau	1
Staten Island	1	Westchester	1
Hostos	5	Suffolk (Brentwood)	1
Kingsborough	2	Norwalk	1
LaGuardia	2	Onondago	2
Queensborough	2	Columbia Greene	1
		Jamestown	1

Total Number of CUNY and SUNY Community College Participants: 40.

CONFERENCE ON
WRITING SKILLS AND LEARNING DISABILITIES
IN COMMUNITY COLLEGE STUDENTS

March 30, 1990

Participants

Name	Community College	Department
Teresa B. Bellew	SUNY Farmingdale	Learning Center
June Blake	Columbia-Greene	Basic Skills
Michele Brown	Hostos	Disabled Student Services
Pat Brown-Height	LaGuardia	English
Jean Bushelon	Rockland	Developmental Studies
Nancy Callahan	Jamestown	Disabled Students Services
Kitty Chen Dean	Nassau	English
Wayne Clavering	SUNY Farmingdale	Learning Center
Carmen Clemente	Hostos	English
Roberta Cohen	Rockland	College Skills
Doreen Collins-Smith	Borough of Manhattan	Reading
Pamela Floyd	Rockland	English
Nancyann Grippo	Kingsborough	Special Services
Christine Grosso	SUNY Farmingdale	Disabled Student Services
Gretchen Haynes	Queensborough	Writing Center
Evelyn Hisz	Borough of Manhattan	Library
Barbara Hovsepian	Rockland	English/Assessment & Placement
Queen Johnson	Borough of Manhattan	Student Support
Nellie Justicia	Hostos	English
Joanne Kinzy	Camden	Learning Disabilities Program
Deborah Knight	Onondago	Learning Disabilities Program
Michele Lee	Queensborough	Disabled Student Services
Kathy Meek	Hostos	Writing Center
Myrna Pagan-Ubides	Bronx	Student Support Services
Sue Putman	Westchester	Learning Disabilities
Fran Reiser	Suffolk	Disabled Student Services
Gerry Rosen	Rockland	Developmental Studies
Charlotte Rubin	NYC Technical	Student Support Services

Name	Community College	Department
Regina Russo	NYC Technical	Student Suport Services
Gloria Sancho	Bronx	Special Education Services
Joan Sasala	Norwalk	Special Services
Joan Seals	Bronx	Student Devel./English
Bunetta Sleigh	Borough of Manhattan	Student Support Services
Roger St. Clair	LaGuardia	Learning Project
Arlene Stapleton	Kingsborough	Special Services
John Starkweather	Onondago	English
Richad Vamos	Bronx	Testing/Inst. Research
L. Watkins Goffman	Hostos	English
Mary White-Edgar	Manchester	L.D./English
Jean Winter	Bronx	Developmental Skills
Gail Wood	Staten Island	English
Rayna Zwerlein	SUNY Farmingdale	College Studies

Writing Skills Instruction and the Learning Disabled Community College Student: Research and Practice

Presenter: Susan Vogel, Ph.D.
Educational Psychology, Counseling, and Special Education Department
Northern Illinois University

Date of Presentation: December 8, 1989

The importance of writing, as a catalyst of thinking, is second to none. Writing is important not only for academic tasks but for many everyday situations. In postsecondary education, it is necessary to integrate a substantial amount of information received aurally, for example in lectures, with information read. Such integration is only possible when the material is integrated in written form. There is a great need to continue to instruct postsecondary students with learning disabilities in the written language area.

Written language is the highest in the hierarchy of language development, the most difficult stage to accomplish. As a result, writing problems reflect all the problems that learning disabled individuals have experienced in earlier stages of language development. Oral expressive and receptive language problems both affect writing skills. Various types of writing functions are affected by different types of learning problems. Written language problems are among the most revealing characteristics of learning disabilities. In adults, language problems are more evident in writing than in speech. Faculty can use an unaided writing sample as a screening device.

It used to be thought that learning disabilities affect only children and that they eventually disappear. However, learning disabilities do not go away. In adults, they will be more or less evident, depending on the demands of the setting. There is no singular form of learning disability that is the same across all individuals. This makes it very difficult diagnostically, and very difficult for faculty. Learning disabilities are heterogeneous and even one of the major sub-groups, individuals who have dyslexia, consists of sub-types.

The causation of learning disabilities is in most cases intrinsic and is present at birth. In many learning disabled individuals the brain develops differently; the brain is not necessarily damaged, but different. We are now discovering specific neuro-anatomical differences that affect the way individuals take in information through the auditory and visual channels. They affect the way information is integrated to meaning and retained, and cause the memory deficit that we see so often in learning disabled individuals.

Deficits in written expressive language exist on a continuum in learning disabled individuals, just as learning disabilities are on a continuum from minimal to severe. Severity is becoming a very important issue in provision of services in some states. Recently, learning disabled adults have begun to be considered eligible for vocational rehabilitation services solely on the basis of a severe learning disability, even when it is not concomitant with other disabilities. Ninety-nine percent of learning disabled individuals have written expressive language difficulties. Unfortunately, the reasons for the severity, the persistence, and the prevalence of written expressive language disorders are not fully understood.

Following are some broad guidelines to apply in trying to understand the different types of written language problems of learning disabled adults. In the pre-writing stage, learning disabled adults encounter the problem of *finding a topic*. Once having found the topic, however, they have difficulty *developing the topic*, in enriching and providing details. They also have trouble in *researching the topic*. Library skills may be poor and they may be unfamiliar with the use of a computerized index or other reference library resources. These are hurdles that present special challenges for them. Once having coped with them, however, they have trouble *integrating* the masses of written notes that they have taken on the reading that they have done on the topic. They also have difficulties at the *organizational level*. They have trouble following a sequential, step-by-step, orderly progression in using their written notes. Further, their organizational problems are often seen in difficulty using transition words, which affect *cohesion*. Very little research has been done on this subject and it is sorely needed.

They also have problems with the *initiation* of the writing act. At this point, learning disabled adults have difficulty developing ideas. This problem relates to difficulties in the integration and organization of material. The introductory paragraph is often the hardest, especially the thesis statement, which is a crystallization of the whole paper. They also have to come up with a conclusion, requiring a type of *inferential thinking* that is hard for some learning disabled adults. Productivity, the ability to write the appropriate length, is a further problem. It is well known that learning disabled adults write shorter papers.

Another problem, at a more sophisticated level, concerns judging one's audience. Learning disabled adults may not discern the difference between writing to a friend and to a professor. At another level, they may have poor penmanship due to problems with the motor act of writing, and the coordination of the eyes and the hand. Not all the problems described above apply to all learning disabled adults. For example, there are gender differences among learning disabled adults, typically, learning disabled females have better handwriting than the male population, while almost all of them, irrespective of gender, have spelling difficulties.

Learning disabled adults have difficulties in coming up with the right word. For example, words which do not have a concrete referent, such as prepositions, cause them problems. They may use the wrong preposition or the definite article instead of indefinite article. They have problems at the morphological level, for example omitting word endings, such as the "ing," "s" or the "ed." Spelling errors are also made, often because of incomplete mastery of phonics. Two of the most sensitive discriminators in differentiating the learning disabled from underachievers and slow learners, are the tasks of reading single real and nonsense words. Another good discriminator is a phonological segmentation task, involving auditory conceptualization.

There are also problems at the sentence level, which reveal problems with the structure of the language, or syntax. Sentences may be incomplete, run-ons or "tangled" syntax. Alternately, the LD writer may play it safe and write monotonous, simple sentences.

In the rewriting or revision stage, the third stage in the writing process, learning disabled individuals have problems with error detection, or metalinguistic awareness. When they read their papers aloud to locate potential structural errors, often times they are not able to recognize when mistakes have been made, especially with preposition usage. Further, if they do recognize the error or it is pointed out to them, they do not know how to correct it. These metalinguistic impairments reflect their weak oral language foundation on which every other level of language is built. In the revision stage, they have problems monitoring their spelling and mechanical errors, visually monitoring them, and then correcting them.

Lastly, there are problems in the polishing and burnishing stage, the final stage in the rewriting process. Learning disabled adults often need to produce many more drafts until they have identified and corrected all their errors. This process requires a high level of determination and stamina as well as a facilitative instructor and nurturing environment.

The following guidelines are offered to help writing teachers working with learning disabled students in their writing classes:

1. No writing instructional program can be effective without attending to the cultivation of a facilitative writing climate. In such an environment the writer can trust that there will be no penalty to the writer for revealing one's weaknesses.
2. There is no one right approach; however, the creative and sensitive teacher can use the curriculum for non-learning disabled students with some modifications. For example, more time needs to be allowed at each stage of the writing process, in the pre-writing stage to identify a topic, to generate a thesis statement, and to research the issues. More time is also needed for students to complete assignments. More time is needed at the revision stage for conferencing, which, although time consuming, provides multiple opportunities for revising and rewriting.
3. Ample time for oral language interaction should be allowed at each stage. At the pre-writing stage, this is crucial; tape recording brainstorming sessions is very helpful here.
4. At the rewriting stage, it is important to help with the identification and correction of grammatical errors on a one-to-one basis through discussion. Identifying objectives and working on them sequentially in an individualized manner is more beneficial to the learning disabled student than formal grammar instruction. Of course, teaching grammar is necessary also because it provides a common terminology, a way of communicating, but formal instruction alone will not be effective in improving writing of learning disabled adults.
5. Learning disabled students learn best by modeling, followed by discussing the model, comparing different examples, and then by writing activities.

6. It is helpful to focus on one objective at a time, rather than all objectives simultaneously in any one writing task.
7. Writing assignments such as a term paper or research paper given six or more weeks in advance are difficult to tackle. Assist the learning disabled student to break down the task, establish checkpoints, and schedule conferences periodically.

Non-writing classes often entail extensive assignments and/or essay exams. The following suggestions are for instructors in disciplines other than English:

1. Learning disabled students should be allowed extended time on in-class writing.
2. Word-processors should be used where possible during class for note-taking and essay exams.
3. The use of a spell-checker, Franklin speller, a grammar-checker, and/or other tools should be encouraged.
4. Classmates should be allowed to make copies of their notes in order that learning disabled students can compare and double-check that their notes are complete.
5. An additional opportunity for improvement on the "final draft" should be allowed before the formal grade is given.
6. The grade should reflect content without penalty for grammar, mechanics, and spelling errors.

Specific Instructional Strategies to Help Students with Learning Disabilities Develop Writing Skills

Presenter: Patricia Anderson, M.S.
Northeast Technical Assistance Center
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University of Connecticut

Date of Presentation: December 8, 1989

There is no set recipe for teaching writing to students with learning disabilities. Some instructional strategies fit some students and not others. However, most college students with learning disabilities often think about writing as delivering a product for a grade. They have a very narrow focus, and we need to help them see that writing is really a much larger process. Writing incorporates thinking and it is an expression of oneself. Stages in the writing process are as follows:

Pre-writing
- o Topic selection
- o Brainstorming
- o Organization

Writing
- o First draft

Post-writing
- o Editing and rewriting
- o Proofreading

In the area of topic selection, you may need to impose some type of experiential situation to help students generate a topic that they are willing to write about. There is a debate about teaching writing through reading. Students with learning disabilities have difficulties integrating the model of what they are reading into something that they have to write. Reading and writing are two completely different processes for them, which causes difficulty with integration.

Once students have chosen a topic, which includes narrowing down or broadening depending on the nature of the topic, then very often they become stuck. Brainstorming is the next stage in writing. Students with learning disabilities need to have a "bag of tricks" that they can call on for different situations, because the same technique is not going to work for each situation. One of the most popular brainstorming techniques is free writing. But very often students with learning disabilities produce so much information from that process that they do not know what to do with it. Therefore, a verbal discussion or perhaps talking into a tape recorder and then playing it back might be more effective. Students with learning disabilities need different ways of developing ideas, and very often they get stuck because they want these ideas to come out in the right logical sequence. Once they have the topic and the ideas, then they have to logically process these ideas so they can write. Some form of organization is therefore needed.

Producing the first draft involves integration and organization. Many skills are involved at this stage including paragraph structure. Post-writing constitutes two distinct categories, editing and rewriting, and proofreading. Students with learning disabilities need to be taught that a paper is proofread for several reasons several different times. Often these students need to be taught specifically to read for mechanical errors, put the paper aside, and later read it for the flow and organization of ideas.

All skills involved in writing need to be taught concurrently. We cannot teach writing skills one at a time because there are too many of them and we need all of them at once. It is important to account for the student's progress in the whole process, as opposed to the learning of each individual element, to see if they are learning and are able to apply the skills that have been taught.

A number of issues affect the writing of college students with learning disabilities, including:

- Emotional component
- Complexity of writing
- Importance/value of writing
- Matching writing to assignments
- Sense of audience
- Motivation and commitment
- Assimilation vs. direct instruction

It seems that the emotional component of writing is the most important aspect to be aware of. When working with a student with learning disabilities it should be stressed that it is perfectly natural for anyone to have difficulty with writing, which is at the very top of the language hierarchy. Students with learning disabilities have a long history of negative experiences with writing. As they write they are going to reactivate these feelings and are going to feel embarrassed or frustrated. They need to know that it is normal to feel anxious about writing and that all writers experience plateaus and setbacks. They do need to experience these feelings, and they need to know that writing involves emotions and that it is not just sentence punctuation, drills, and skills. Acknowledging that emotional hurdles exist has been successful in helping students with learning disabilities overcome their anxiety about writing.

Regarding the *sense of audience*, the audience in an average classroom is the teacher. Most of the time the student is writing a paper to please the teacher and to get a grade. Students need to be aware that there are different reasons for writing different kinds of assignments and that there are different kinds of audiences, requiring adjustment of the task. Students with learning disabilities, as has been stressed by a whole body of literature, cannot easily evaluate this situation and modify their skills accordingly.

Motivation and commitment cover everything that has been mentioned so far. Students should have some investment in wanting to improve their writing, preferably beyond just getting a better grade. They need to be committed to developing writing as an effective communication tool.

Regarding *assimilation versus direct instruction*, students need to be taught directly what the different characteristics of writing are and how they can go about attaining them. This should be discussed not only in terms of their own strengths and weaknesses, but in terms of what the actual skills are, and what skill needs to be developed.

There are a number of strategies that can be used to deal with the writing problems of students with learning disabilities. These strategies can be used in a writing or composition classroom, on a one-to-one basis, or they can be modified for use in other content areas where writing is also required.

Most importantly, students with learning disabilities should understand the assignment. The assignment should be presented in writing and also orally, so that students can hear it and also have something to refer back to if they forgot what had been said. Some teachers advocate the use of a tape-recorder. This is particularly useful in a conferencing situation where a student comes in to talk about a paper with a teacher, understands what is going on, makes some interesting contributions, and then goes home and forgets everything. What is being asked of the students should be clearly explained so they understand the particular task and what the type of assignment means to them. A visual framework for each type of exercise could be provided for the students, but the danger with this type of information is that the student might lock into that framework and might consequently be unable to vary from it.

Sometimes teachers of writing tend to forget to use student writing as a model. Student writing is easier to understand than some of the models found in books.

Teachers should be able to state exactly what they expect from their students. They should define what is meant by a strong and appropriate thesis statement, an introductory paragraph, a given number of supporting ideas, sufficient details to assure clarity, a concluding paragraph, and format or style requirements including title page, length, margins, spacing, references, and footnotes. They should tell the students how many references are expected, how many examples to provide, and so on. It is important not to leave anything to chance. Being very specific with the number of details is particularly important for students with learning disabilities. Further, these detailed instructions need to be repeated for each assignment.

Students need to be helped to organize information. Flow charts, timelines, comparison/contrast charts, circular patterns, mapping, and outlining can be used. Sometimes teachers ask students to produce an outline before they can write. An outline involves taking the ideas developed and organizing them in some logical way, so that they can then write from them. Given students' problems with outlining, some of the other methods just mentioned might be preferable; any method that presents ideas in a sequential manner can be useful.

A cut-and-paste method can be used to help with organization; a part that has been written can be cut and moved around so that the writing flows more logically. "Post-it" notes are useful in organizing main ideas because they can be shuffled around to correspond with the original writing plan.

Another strategy is to have students develop individual writing notebooks, which can be divided into three sections. In one section they can keep all of their papers, rough drafts, notes, outlines, and visual charts. In another section they can record their individual spelling errors, and in a third section they can record grammatical and mechanical errors that they have noticed in their own papers. The first section will help them to see the improvement that they have made from one paper to another, and also gives them a means of reference for the purpose of checking back. The other two sections provide a way for them to keep a personal dictionary. These notebooks are not all-inclusive and are not necessarily a teaching tool, but can be useful for students who make the same errors over and over again.

The literature speaks about explicit versus implicit learning. Teaching rules and memorization, particularly for the learning disabled population, does not work, because these students do not have the necessary underlying understanding. Choral reading can help students understand the reasons for using punctuation and therefore will help them understand specific rules. Both kinds of learning are needed: explicit learning, where students are learning to apply particular rules and techniques, and also implicit understanding, which may involve a lot of exposure to good examples of punctuation, grammar, and spelling.

Another helpful strategy to use in a classroom is to have students write together, particularly to develop a second point of view. This helps with a sense of audience and gives students an opportunity to participate in the writing/thinking process of others.

The evaluation of papers is an important process. Students' overall writing progress should be evaluated rather than just individual products. A certain number of drafts, including organizational notes and brainstorming material, should be evaluated before a grade is determined. Students should be given the option of determining when a paper is in its final format and ready to be graded. A few elements should be tackled in each paper. Each paper produced by a student with learning disabilities will not be perfect. The student should strive for personal improvement. Students with learning disabilities may need numerous revisions. Frequently, all the information is there but is may be out of order. The final paper should be compared with the original organizational method (e.g., flowchart, chart, map, etc.) for flow and consistency. "Post-it" notes and the cut-and-paste method, mentioned above, can be used for reorganization when writing the next draft. All drafts, notes, and papers should be kept sequentially in the individual writing notebook, mentioned above, in order to see progress. The use of red ink should be avoided in grading because of the emotional reaction that this color may trigger. Learning disabled students need individual consultation. Besides out-of-class appointments, individual help can be built into the class while the other students are working independently, or students can work in pairs or groups to review each other's writing.

Students with learning disabilities need to learn proofreading techniques. They should be taught the common proofreading symbols and abbreviations used in margins. They should learn to read backwards to check for spelling or sentence structure. One can start at the bottom right-hand corner of the page and read the words in reverse order or one can also read each sentence from bottom to top. The material can also be read aloud, using a finger or pencil to follow each word. The paper can be put aside and reread several times, each time focusing on a different dimension, including coherence, missing words, word choice, spelling errors, and so forth. Other people can be asked to read a draft for content and/or mechanics. Students should be asked to write on every other line or use triple spacing to facilitate editing and proofreading.

Students should review an instructor's comments in order to understand them. Rewriting should be encouraged so that students feel that the comments are being used constructively and not as criticisms.

Reference:

Perreiro, D. (1984). Enhancing written expression of the learning disabled. The Office of Special Services, Marist College, Poughkeepsie, N.Y.

Do Learning Disabled Individuals with Writing Problems Differ From Other Poor Writers?

Presenter: Anna Gajar, Ph.D.
Department of Special Education
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Date of Presentation: March 30, 1990

Anna Gajar reviewed characteristics and behavior common in learning disabled students at the postsecondary level and, specifically, discussed writing difficulties they faced. She summarized her group and case study research into the writing problems of different learning disabilities subtypes, and offered suggestions for working with learning disabled students on writing skills.

Learning disabilities are heterogeneous, and while the definition of learning disabilities provides us with a theoretical base, it is of little use in the practice of identification or diagnosis. This causes a paradox: you have a definition but not identification. Because of this paradox, practitioners in the field are starting to identify learning disabilities subtypes.

In her work with learning disabled postsecondary students, Gajar has observed three subtypes: language disabled, perceptually disabled, and motorically disabled.

Students with learning disabilities in the language area have good auditory acuity but exhibit problems with central and auditory memory, with syntax, narrative language production, and word finding. These problems translate to misunderstanding of what is being said, and trouble understanding the meaning of words. Learning disabled students in this subtype interpret language literally, in contrast to poor writers, who do not manifest this problem. In this subtype, thoughts and ideas are incompletely expressed both in spoken and written language. Students in this group produce bizarre essays.

Another set of characteristics is associated with students who have visual perceptual learning disabilities. Approximately 15% of the learning disabled students at Penn State fall into this group. These students exhibit poor visual memory. They are distractable and, because they have problems structuring and organizing time, they are often late. They are inconsistent spellers, in contrast to poor writers, who make mistakes that are usually consistent. Gajar stated that for learning disabled students, spelling problems are very difficult or impossible to overcome.

The third subtype comprises learning disabled students with *motoric* disabilities, also known as clumsiness or apraxia. Approximately 40% of learning disabled students at Penn State seem to fall into this group. They are uncoordinated and have difficulty sequencing motor acts. These students can express themselves well orally but have severe handwriting problems.

Writing problems result from weaknesses associated with each of the three subtypes, or a combination of all or some of them.

Gajar summarized two group research studies she conducted into written expressive disabilities in college students. The first study analyzed the compositions of 423 Penn State students who were enrolled in beginning level English classes. The compositions were analyzed according to 17 variables covering fluency, syntax and vocabulary. In addition, each composition was assigned a holistic grade by two independent English professors. The number of different words used in a composition was the single best predictor of independent holistic grading, followed by number of words in a paragraph.

The second study used a computer analysis to compare written language variables in compositions of learning disabled students and poor writers without learning disabilities. Differences were found on two factors, which were labeled vocabulary fluency and syntactic maturity. The learning disabled students wrote fewer words and did not utilize as many different words. However, they produced longer sentences and t-units (single independent clauses) than the poor writers without learning disabilities.

Gajar declared that for group research to be meaningful, it should be based on a number of replicated single-subject studies. Group studies should then be replicated across college settings. Since the field had not reached this stage, in the remainder of the presentation Gajar concentrated on individual case studies that illustrated characteristics of the three subtypes.

The assessment battery used at Penn State includes a writing sample. Students' writings are evaluated with respect to organization of thoughts, logical development of the essay, and strong, appropriate conclusions. Additionally, handwriting, spelling, grammar, vocabulary, and punctuation are assessed. Following the assessment, clinicians work with students individually. The clinicians are graduate students in special education, psychology, communication disorders, and curriculum and instruction. In working with students, an underlying assumption is made that a learning disability lasts one's whole life. While it is possible to teach compensatory strategies, it is impossible to remediate the basic deficits. One way to distinguish learning disabled students from poor writers is that, while the latter can become totally fluent in a skill, this is not possible for the learning disabled student.

The case of "Sam" (not real name) was presented. The clinicians who worked with him helped him considerably with proofreading, spelling, and organization of his written work. He needed to be allowed to use his own ideas in written assignments without judgements on the part of the clinician. He became easily frustrated and needed to be encouraged based on the progress he was able to make. He had difficulty finding the words he wanted to use, even when he knew what he wanted to say.

He taped lectures and was given untimed test conditions. He was able to use a word processor. He was greatly helped by using a hand-held photocopier because he had great difficulty taking notes from a textbook.

In tutoring sessions through the English department, he learned to tape and dictate his thoughts for essays. He also taped main points to study. He learned to organize his thoughts for essay tests. Others helped him with proofreading. Dr. Gajar mentioned that the question had been raised concerning whether help with proofreading was legitimate or whether it constituted cheating.

It was helpful to act as a facilitator with Sam, to help him put his words to paper. It was helpful for the clinician to ask him, "Was this what you wanted to say?" rather than writing things the way it seemed they should be written.

Gajar discussed the issue of whether a person can be an author if he/she "cannot write." Referring to several dictionary definitions of "author," she concluded that it was indeed possible.

A number of learning disabled students are gifted and in earlier years of their education were able to function at an average level; therefore, they were not referred to services until after they arrived at college. Basic skills training is important for learning disabled children in the early years of education. Later, as young adults with learning disabilities, they need strategies for taking notes in class, obtaining information from text, evaluating the teacher, test taking, time management, self-management, and writing a coherent essay.

The concept of "strategy" was defined as "the response that is taken if the alternative actions or options have been identified, presented, or tested." The success of each action is determined and one option is chosen.

Gajar outlined the "PA-A-PA paradigm" which she has developed to teach strategies for writing to students in each of the learning disabilities subtypes. The paradigm consists of the Pre-Activity, the Activity itself, and the Post-Activity, which make up the three components of writing. The paradigm is cyclical in that each activity leads to a new one; the Post-Activity leads to the beginning of a new cycle.

Students in the first subtype, language disabilities, have a great deal of trouble with the Pre-Activity. They have problems figuring out what is required by the professor. Students in the second and third subtypes have problems with the Activity itself and with the Post-Activity, for example, reviewing what they have written.

It needs to be kept in mind that the learning disabilities population is diverse. Students with poor language and motor skills are poor note-takers, and their compositions are either incoherent or unreadable. To write one needs to replay in memory what is essential, and write it down in a meaningful way. Language learning students have a "slower replay." They lose their train of thought, and have difficulty with vocabulary and expressing concepts. Motorically disabled students know what they want to say but they bceome fuzzy because motor energy interferes with the thought process.

Gajar noted the importance of the types of help that can be given to learning disabled writers by instructors, tutors, and directors of support programs. It needs to be determined what kind of help is appropriate and how much can be given. Learning disabled students differ in the way they express their thoughts. Gajar posed a question: will these students be given help in attaining authorship by means of alternative strategies, or will we keep insisting that, in spite of students' disabilities, they must follow the prescribed route even though it leads to failure?

In conclusion, Gajar stressed two points. First, specific learning disabilities cannot be remediated; rather compensatory strategies must be learned. Second, learning disabled students can learn skills to a certain level of proficiency, but the skills may never become automatic. The skill may break down in times of stress or anxiety.

A Three-Tier Approach for Helping Dysgraphic Writers.

Presenter: Abraham Kupersmith, Ph.D.
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Date of Presentation: March 30, 1990

Eight years ago, Abraham Kupersmith realized that he was dyslexic and had a specific problem of dysgraphia, involving difficulties with spelling, organization and mechanics of written language. While the research literature has identified the major areas of difficulty in dysgraphia as handwriting, spelling, syntax and punctuation, discussion of organizational problems has been avoided.

Kupersmith conducted a survey at the Borough of Manhattan Community College and found that about 15% of the students in remedial writing classes were repeating the course for a third time or more. He speculated that some "multiple repeaters" were dysgraphic.

At the time he was diagnosed, he started working with dysgraphic students in community colleges and has been able to make explicit many of the techniques that he had unconsciously developed to allow his own survival in college. These techniques were subsequently refined and developed as a three-tier process.

Kupersmith claims that there is no need for instructors to communicate to students that they think they are dysgraphic. Students, like many people, associate learning disabilities with mental retardation. Rather than concentrate on labeling, the teacher should concentrate on a method such as his. The first element involves analyzing papers written by dysgraphic students in terms of spelling, syntax, punctuation, and organization.

The second step is to administer an educational history interview. The interview places the student in a comfortable position in relation to the teacher, since most people enjoy being interviewed. The interview can be presented by saying to the student, "I am interested in the problems you are having in writing, and talking about the problems you have had would help me work with you." This takes the interviewer outside of a judgmental role, and puts him or her in a role of helper. The key idea is that conventional remediation does not work for dysgraphic students;

thus, finding ways to communicate with them is one of the most important things to do.

The third step in the procedure is to work on strategies based on the analysis of the paper and the interview. Kupersmith reviewed various techniques applicable to people with different deficits. The most general and useful technique is called "talk-write," which involves teaching students to write as they talk. The instructor can also "take dictation" simultaneously. Kupersmith suggested that the student should receive feedback, in terms of punctuation and fragmented or run-on sentences. As a result, the student begins to associate patterns of speech with written conventions. This method draws on their strengths in spoken language as they adapt them to written language.

Another strategy concerns the editing stage of the paper. Kupersmith emphasized that one of the main causes of editing problems is that students are taught to read in spans of four, five, or six words. However, in order to edit effectively, it is necessary to read a word at a time. In order to facilitate proofreading, students are asked to hold their pens in their unnatural hand, point to each word, and utter it at the same time. The advantage of this editing technique is that it picks up a dropped "d" or missed "s," and words that are left out. It also helps the student to confront sentences that have no meaning.

Students are then asked to memorize one sentence, by looking away and pronouncing it, which enables them to hear it. Kupersmith believes that students can be trained, beyond their initial abililty to hear language, to remember a sentence and repeat it verbatim. Thus, there is growth in the ability to hear language and record it when practice is provided in this way.

However, Kupersmith believes that for ten percent of students talking aloud is confusing. A possible variation is to have such students use a yellow highlighter on a draft and have them underline the words slowly, so they appear in relief as they are reading them.

Also in the editing area, Kupersmith asks students to "stack" stenences, or to learn to order them logically. Students are also presented with a paragraph that has already been stacked. One advantage of this method is that students work with a sentence as a whole, rather than in parts.

Kupersmith has developed a way of working with whole sentences. This method borrows from techniques that others have developed. He uses the idea of simple and complex sentence, but does not use terminology like subordinate clause, relative clause, or nominative absolute when working with students.

Students are taught to break up a simple sentence into (1) a "title" and (2) a "statement." The title of the sentence is the subject, and the statement is the rest, so that there is a two-part division in a simple sentence. There is an intuitive recognition that the sentence breaks between title and statement. In addition, it is important to teach that the sentence has one point, i.e., one important fact. Once students understand the concept of the simple sentence, they can learn to develop compound connectors.

In working with students, Kupersmith uses graphic representations to illustrate concepts. A simple sentence is represented by one straight line while a compound sentence is represented by multiple straight lines.

The reason that some people claim that dysgraphic students are almost impossible to work with in the area of writing is the extreme division between form and content that they experience. The more that this breach can be healed, the more the students can be helped.

The compound sentence is a good place to introduce the idea of transition. It is the tightest kind of transition imaginable. Kupersmith refers to the idea of old and new when teaching the concept of transition. The first part of the sentence introduces something that is new, and the second part must branch in someway from what was new through what has now become old to what is now new again.

Complex sentences present a problem in that they involve mostly analytical thoughts as opposed to associational thoughts. A complex sentence, like a simple sentence, states one point. Like the simple sentence, there is a title and statement. However, there is a complex extension in the title or in the statement. Using this method, students begin to see the visual representation of the sentence, and they begin to understand that words fit into packages, that sentences have a form, distinct from speech. Once the sentences are in a stack, students can answer the question, "What is the most important sentence in the stack?" There is a need to have the student intuitively recognize that most sentences are of almost equal weight. Once the students recognize this from the stack, they can answer the question, "Is there one thing about this that you were really trying to say?" and that usually produces the topic sentence.

Some techniques work better than others, but the more experimentation that goes on, and the more reaching that each individual teacher does in terms of his or her own imagination to find the channel that works, the more these dysgraphic students can be helped and the better the teaching is.

The secret to working with students who have learning disabilities is recognizing that they organize language in terms of questions and answers. Organizational problems stem from a wish to organize the material associationally, rather than analytically, which explains why dysgraphic students often write stories relatively well. Examination of the associational pattern reveals what dysgraphic students are trying to do, and explains problems such as run-on sentences, often accompained by poorly organized paragraphs, and lack of paragraph transition.

Dysgraphic students ask themselves questions as they write. In order to make a seemingly unintelligible essay coherent, he recommended that the instructor read through the essay and figure out when the student asked himself a silent question and what he then answered. He suggested that a transition is going on in terms of the students' internalized questions, which often provides a shift in the answer that seems to have little to do with the rest of the essay.

Kupersmith described another strategy, also based on questions and answers, to teach organization of the paragraph. Students are first asked to pick a sentence from the stack that they identify as having the highest level of generalization. The second step consists in turning the statement into a question, to determine if the rest of the paragraph answers that specific question. With the question on one hand and the answer on the other, students begin to see an associational pattern. But beyond that, they begin to understand what they could not understand through traditional methods of teaching rethoric. Therefore, the answer and question strategy provides the students with a useful technique for organizing writing. According to Kupersmith, the goal of teaching dysgraphic students is to move them from the narrative associational horizontal expansion to the vertical analytical expansion.

The Writing of Community College Students: Comparison of Students with and without Self-Reported Learning Difficulties

Presenter: Dolores Perin, Ph.D.
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Date of Presentation: March 30, 1990

While adults with learning disabilities have often overcome major reading problems, expressive writing and spelling skills often remain seriously deficient. In many cases, oral language is excellent but when writing, a student with learning disabilities may greatly underrepresent his or her true ability and knowledge. Sometimes an instructor can hardly believe that the articulate student who makes sophisticated contributions to class discussions is the real writer of a composition that is strewn with logical inconsistencies, and spelling and grammatical errors, and looks as if it were produced by someone functioning on a low intellectual level.

The incidence of learning disabilities in CUNY and SUNY is not currently known although rough estimates may be made, as in the introduction to these proceedings. Even if the extent of the problem were known, individual students who have been formaly diagnosed may not choose to identify themselves to faculty. However, by asking whole classes to describe academic or learning problems they have encountered, a teacher may be able to identify students who are "at risk" for learning disabilities and who need special attention. Toward this end, the present study was conducted to discover whether patterns of writing skills varied among community college students as a function of their reported learning difficulties.

Community college faculty and support staff who had been attending CASE/IRDOE's staff development conferences on learning disabilities were invited to participate in the study by administering a questionnaire and providing writing samples for a whole class, a small tutoring group, or individual students with whom they were working. Writing samples consisted of first drafts of essays written without assistance.

Participants were asked to include, if possible, students who were known or suspected to have learning disabilities. Each student who completed a questionnaire and contributed a writing sample provided written consent. Questionnaires were completed anonymously and the only identifying information requested on these and the writing samples were the student's initials. The questionnaire, which was developed for this study on the basis of deficits associated with learning disabilities reported in the research literature, follows this report. While the instrument could be used informally to screen for the possibility of learning difficulties, it is not intended for diagnostic purposes. Thorough testing and interviewing by a qualified professional are necessary in order to diagnose learning disabilities.

The questionnaire contains 22 questions. Of these 14 refer to indicators of learning disabilities. The target questions were items 2, 3, 4, 6, 7, 9, 12, 13, 15, 16, 17, 19, 20, and 21. A "no" answer to question 2 and "yes" answer to the other questions were considered possible indicators of learning problems. For each student, the number of answers indicating learning problems were added up to derive a total "learning difficulties" score. For the purpose of the study, students who scored 8 and above were considered to have learning difficulties. Thirty-two percent of the sample fell into this category. Of course, there is no relationship between the incidence of learning difficulties in this sample and in the CUNY and SUNY system as a whole, especially since participants were asked to include individuals known to have learning problems if they could.

A total of 129 questionnaires and writing samples were submitted. Twenty-six students indicated on their questionnaire that they did not speak English at home, and were not included in the analysis. Therefore, a total of 103 questionnaires and writing samples were analyzed.

Each student was assigned to one of four groups, depending on his or her learning difficulties score, and on whether he or she had been diagnosed as learning disabled and/or had received special education services in the past.

Group 1 (N = 20) comprised individuals who scored 8 or above on the questionnaire, and had received special education services and/or had been diagnosed as learning disabled ("yes" answers to questions 6 and/or 7). Group 2 (N = 13) had a score of above 8 but has answer "no" to questiosn 6 and 7. Group 3 (N = 12) had a score below 7 but reported no diagnosis of learning disabilities and/or special education services in the past. Group 4 (N = 58) had a score of 8 and had never been diagnosed as learning disabled or received special education services.

The writing samples varied in length, for the most part because assignments and requirements varied according to the instructor and course. For most writing samples, the first 185 words were analyzed, adding on the words needed to reach the end of a sentence. When samples were shorter, the whole sample was used. The writing samples were analyzed for frequency of spelling errors, grammar errors, word usage errors, punctuation errors, and poorly written sentences.

Spelling errors were counted to determine error frequency. Grammar errors included errors of verb tense, dropped, added, or substituted endings, and word omissions. Word usage erros included similar sounding words, and confused idioms or phrases. Punctuation errors included comma omissions, insertions and substitutions, and capital omissions and insertions for initial letters of words. Sentences were scored as poorly written if they were "awkward," incomplete, or run-on. Sentences were scored only if problems could not be described in terms of grammar or word usage errors. Spelling, grammar, and word usage errors were each expressed as a proportion of total words analyzed. Sentence errors were expressed as a proportion of the total number of sentences analyzed. Punctuation errors were expressed as a frequency rather than proportion, meaning a possible confound between length of writing samples and frequency of errors; shorter samples provided fewer opportunities for punctuation errors.

Grammar, word usage, punctuation, and sentence errors were initially scored by the presenter, who then trained two further judges. Inter-rater reliability ranged from .50 to .84. The only correlations below .70 were for sentences (.50) and word usage (.52). It appeared that one rater's sentence errors were another's word usage errors.

Proportions of spelling, grammar, word usage, and sentence errors, and frequency of punctuation errors are shown in the following tables:

Type of Error: Percent ot Total Words Written

Group	Spelling		Grammar		Word Usage		Sentence	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
1	4.65	5.19	3.60	2.54	.90	.79	23.15	16.71
2	1.46	1.20	4.15	3.13	.85	.80	27.46	18.71
3	2.17	1.95	2.67	2.64	.67	.78	12.33	10.57
4	1.74	2.37	1.43	1.66	.50	.86	16.31	17.69

Group	Frequency of Punctuation Errors	
	Mean	SD
1	3.05	3.02
2	1.62	1.71
3	1.17	2.25
4	1.81	2.06

Statistical analyses showed some significant group differences. Group 1 differed from Groups 2 and 4 in the proportion of spelling error made. Group 4 differed from Groups 1 and 2 in the proportion of grammar errors. Groups 2 and 4 differed in sentence errors. No other differences were statistically significant.

In this study, Group 4 could be seen as a type of "control group" because students in this group had a low incidence of self-reported learning difficulties and had not been diagnosed as learning disabled or received special education services. This group made significantly fewer spelling, grammar and sentence errors than the other groups. While the extent of differences varied depending on the type of error being analyzed, the overall pattern of findings suggests that there is some validity to using self-reports of learning difficulties as a basis for making decisions about which students need special help with writing assignments.

Group 1 and 4 can be seen as being at two ends of a spectrum of learning needs. Group 1 reported learning problems and also a history of special education or a learning disability diagnosis, while Group 4 did not report many learning problems in the present or past. Group 1 made significantly more spelling and grammar errors than Group 4: the self-report questionnaire was able to identify a group of students who needed special help with spelling and grammar. While Groups 1 and 2 made similar numbers of sentence errors, only Group 2 differed significantly from Group 4. The pattern of differences, despite the lack of statistical significance for Group 1 corroborates the suggestion that self-reports can inform instructional decisions regarding spelling, grammar, and sentence-type errors.

There were no group differences in the area of word usage. Further research, including refinements of the scoring system for this category, seems indicated, since various studies have found that learning disabled individuals often experience word-finding and vocabulary problems.

The questionnaire might be useful for community college faculty in a wide variety of content areas whose courses include writing requirements. For example, at the beginning of a semester, the questionnaire could be administered to the whole class, providing the instructor with information regarding which students might be "at risk" for writing problems. If students are interested in receiving help, they could be referred for support services such as tutoring. If a large portion of a class self-reports learning difficulties, the instructor may need to teach writing skills in conjunction with the specific subject matter.

Of course, students may be reluctant to provide their instructor with information concerning their learning difficulties. Some students may have received special education services when younger and may no longer wish to identify themselves as having special needs now that they are in college. Instructors may consider administering the questionnaire to the whole class but not collecting the completed questionnaires. Rather, she or he may use the activity as a basis for describing support services available through the college. The questionnaire could thus be used as a means of helping students gain self-awareness of learning difficulties.

Hands-on Workshops

Workshop Leaders

December 8, 1989: Catherine Corbo, Ph.D., Brookdale Community College, Lyncroft, New Jersey.

March 30, 1990: Patricia Anderson, M.S., University of Connecticut, Storrs, Connecticut.

A hands-on, experiential workshop based on the writing samples and questionnaires collected during the pre-conference inservice activities was given at each of the two full-day conferences. Both workshop leaders were learning disabilities specialists who had much experience with college-age individuals.

Twenty writing samples from those submitted in the pre-conference training phase were selected and presented on overhead transparencies. The samples represented a range of writing skills deficiencies manifested by learning disabled community college students. The workshop leaders led discussion of diagnostic and prescriptive issues based on the samples. Information about the individuals whose writing samples were being discussed was provided during the discussions.

Typically, the leader presented a writing sample, and the participants were asked to describe the weaknesses and strengths they detected. The leaders then elicited and drew connections between the patterns manifested in the samples, and characteristics of learning disabilities. Appropriate instructional strategies were discussed in regard to each of the writing samples considered. In the workshop discussions, participants drew on their own experiences of teaching students with severe writing impairments.

Conference: Effective Strategies for the Instruction of Learning Disabled Community College Students
December 8, 1989

SUMMARY OF RATINGS AND COMMENTS

Note: Numbers in parentheses are frequencies of ratings.

Ia. The keynote presentation "Writing Skills Instruction and the Learning Disabled Community College Student: Research and Practice" was:

	1 inadequate	2 fair	3 good	4 very good	5 excellent
Freq.	(1)	(1)	(13)	(11)	(7)

Percentage of ratings 3 or higher = 94% (n=33)

Ib. This presentation helped me to understand better the different types of writing problems experienced by learning disabled community college students:

	1 to a very small extent	2 to a small extent	3 to a moderate extent	4 to a large extent	5 to a very large extent
Freq.	(2)	(1)	(13)	(13)	(4)

Percentage of ratings 3 or higher = 91% (n=33)

Ic. The presentation provided useful information about research findings that could be applied in teaching:

	1 to a very small extent	2 to a small extent	3 to a moderate extent	4 to a large extent	5 to a very large extent
Freq.	(1)	(2)	(15)	(9)	(5)

Percentage of ratings 3 or higher = 91% (n=32)

Id. List some useful ideas that emanated from this presentation.

-Some useful generalizations
-Advocacy is very important (2)
-Suggestions for classroom and institution modification
-LD students have language deficits
-They do not master spelling rules
-Have great difficulties organizing material
-Are not aware of their own mistakes in writing
-They are not fluent in finding material to write about

-Sample of student writings and problem areas
-Importance of writing
-Using poetry
-Emphasis on LD student's need for more time to complete assignment
-Reinforcement of auditory perception to aid expressive writing
-Recognize characteristics of learning disablity in writing patterns
-Strategies for special intervention and modeling approaches
-Specific errors and analysis was helpful
-Using taperecorder during brainstorming session
-Using lap top computer
-Giving separate grades for content, usage, grammar

1e. What additional information would you have liked?

-Recognition that CUNY students are, for the most part, non-mainstream (e.g. non-white; non-middle class; non-native, women, parents, workers)
-How to identify the LD/ESL students, and if there are any ways to help them that are different from those whose native language is English (2)
-More specific practices to be used with LD students
-More innovative ideas
-How effective is grammar software
-More information on how word-processors help
-More prescriptive programs for teaching writing skills
-More case studies
-Actual workshop exercises
-More focus on student papers
-Dealing with methods as a whole, where LD problems are not addressed across curricula
-Useful to have list of tests to differentiate LD from unskilled students
-How to conduct informal assessments prior to engaging student in writing activities
-Multi-sensory approaches
-The connection between speaking and writing, listening and reading
-More about current research (2)
-Definition of LD
-Test practices

2a. The workshop "Specific Instructional Strategies to Help Learning Disabled Students Develop Writing Skills" was:

	1	2	3	4	5
	inadequate	fair	good	very good	excellent
Freq.	(0)	(6)	(7)	(16)	(4)

Percentage of ratings 3 or higher = 82% (n=33)

2b. The workshop provided an understanding of writing problems in college students:

	1 to a very small extent	2 to a small extent	3 to a moderate extent	4 to a large extent	5 to a very large extent
Freq.	(0)	(6)	(10)	(11)	(6)

Percentage of ratings 3 or higher = 82% (n=33)

2c. The workshop provided practical suggestions that could be used to work with learning disabled students:

	1 to a very small extent	2 to a small extent	3 to a moderate extent	4 to a large extent	5 to a very large extent
Freq.	(1)	(3)	(8)	(14)	(7)

Percentage of ratings 3 or higher = 88% (n=33)

2d. List some useful ideas that emanated from this workshop:

-Modified mapping techniques
-Good, and clear, well prepared hand-outs
-Use of Post-it notes
-Evaluating content separate from mechanics
-Tape record conference sessions (2)
-Ways to work with students (4)
-The use of different colored pens for correcting of mechanical errors
-Writing strategies (2)
-Writing as a process rather than a product
-Very useful for faculty development (2)
-Excellent summary
-Use of an individual writing notebook

2e. What additional information would you have liked?

-More audience participation. (Some colleagues in attendance today have developed new methods.)
-Discussion of obstacles from faculty at colleges when working with LD in writing
-Would have liked the speaker to conduct a workshop
-More ideas to implement
-More specific techniques (2)
-Fuller development of ideas and questions that the audience began to develop

3a. The workshop "A Diagnostic-Prescriptive Approach to Writing Problems in Learning Disabled Students" was:

	1	2	3	4	5
	inadequate	fair	good	very good	excellent
Freq.	(2)	(3)	(9)	(8)	(8)

Percentage of ratings 3 or higher = 83% (n=30)

3b. It was helpful to discuss the writing problems of individual students:

	1	2	3	4	5
	to a very small extent	to a small extent	to a moderate extent	to a large extent	to a very large extent
Freq.	(3)	(2)	(10)	(6)	(5)

Percentage of ratings 3 or higher = 81% (n=26)

3c. The workshop provided useful suggestions for helping learning disabled students improve their writing skills:

	1	2	3	4	5
	to a very small extent	to a small extent	to a moderate extent	to a large extent	to a very large extent
Freq.	(5)	(5)	(9)	(6)	(3)

Percentage of ratings 3 or higher = 64% (n=28)

3d. List some useful ideas that emanated from this presentation.

-Memory for design test, error analysis, survey results
-General characteristics of LD adults
-How to make some preliminary diagnosis of LD
-Everything was useful
-Quick assessment measures are what is presently needed due to the increasing numbers of students we are seeing
-Example of some useful tests
-How the brain works and why LD students exhibit the behavior we see in class
-Ways in which LD students could be identified by teachers
-Comparison between those who are LD and those who are educationally deprived
-Bibliographic information
-Neuropsychological review, cheap diagnostic tests
-Specific information, facts, data
-Differences in dynamics of LD adults compared to LD youngsters

3e. What additional information would you have liked?

-More techniques to help students compensate for disability (2)
-More on diagnosis/prescriptive if this exists for LD (3)
-More organization on what do you do
-More problem-solving
-Workshop exercises on student papers (3)
-Closer scrutiny of writing samples before exhibiting them as LD as opposed to educationally disadvantaged
-More data on how writing samples can help us identify a probably LD student
-Maybe a handout with her yellow graph and the percentages involved
-Workshop format

4. To what extent did the conference meet your expectations?

	1	2	3	4	5	6	7
	Not at all						to a great extent
Freq.	(0)	(1)	(1)	(5)	(15)	(9)	(3)

Percentage of ratings 4 or higher = 94% (n=34)

5. How would you rate the conference as a useful and productive experience?

	1	2	3	4	5	6	7
	Not at all						to a great extent
Freq.	(0)	(1)	(1)	(4)	(12)	(9)	(5)

Percentage of ratings 4 or higher = 94% (n=32)

6. What did you like most about the conference?

-Practical suggestion combined with theory
-Seeing friends and colleagues
-Practical aspect of it
-Dr. Vogel's presentation
-Dr. Corbo's presentation
-Bringing up questions
-The morning sessions
-Speakers experienced in their field
-Last presentation
-Interactive presentation and administration of specific tests
-Meeting others involved with LD (2)
-Varied perspective
-A lot of useful information discussed
-Information about how to assess writing samples and determine symptoms of LD
-Practical suggestions, both to diagnose and help students
-Highly informative, the speakers presented experiences, knowledgeable accounts and strategies for recognizing LD students' writing errors

-New information about research
-Selection of topics, speaker, handout material
-Well-organized, focused conference

7. What did you like least about the conference?

-Room too small, too hot (5)
-Presentation too prescriptive, did not encourage participation (3)
-Rehearsing of overly familiar
-Not enough time (5)
-Workshops were too long
-Third speaker too disorganized
-Have one speaker break into smaller workshops
-Lack of more visually appealing transparencies
-Not enough attention to the fact that many of our students may or may not be LD but show many of the symptoms, often these symptoms are related to cultural differences in use of language, not necessarily a neurological problem
-The speakers all underestimated the background and experience of the audience
-Lunch too expensive

8. What would you like to see included in future conferences?

-More interactive format (2)
-Difference between LD and ESL student patterns of errors (2)
-How writing teachers or others who work with LD students could help other faculty to deal with the papers of LD students
-More techniques to use with students (4)
-Focus on one speaker in the morning, one in the afternoon
-More of what we had in the past
-Larger room, video presentations, panel discussion
-Workshops on student work (3)
-Dealing with college as whole in terms of general ignorance and/or intolerance of LD students
-Workshops. Break up in groups. Work on ideas in smaller group
-Hear about helping disabled adults with math, arithmetic and calculus
-Connection between reading/writing, listening/speaking
-Student's writing at 6-week intervals and a list of teaching/tutoring techniques used
-Perhaps a larger room and more interactive discussion
-More hands-on work on teaching methods
-Better planning

Demographic Information

9. For how many years have you worked in a community college:

17%	0-2 years	Freq. 6
29%	3-5 years	Freq. 10
17%	6-10 years	Freq. 6
5%	11-15 years	Freq. 2
29%	16+ years	Freq. 10

10. What department do you work in?

English	6
Communication Skills	2
Basic Skills	1
Student Development	3
Humanities	2
Developmental Skills	3
Student Support Services	4
Disabled Student Services	3
Learning Center	1
Education Division	1
Student Personnel Services	1
Special Education Services	5
Sociology	1
Tutorial Services	1

11. What is your present position?

Chairperson	1
Program Director	1
Program Coordinator	1
Instructional Faculty	16
School Psychologist	2
Coordinator of Disabled Students	4
LD Specialist	4
Career Specialist	1
Tutor	3

12. What subjects are you currently teaching?

Basic Skills	3
Advanced writing	4
Introduction to poetry	1

English as a second language	2
Reading skills	3
Use of computer	1
English	4
Techniques of college learning	2
Individualized support services	1
Social work, Sociology	1
Tutoring	1
Reading/writing	2
Remedial writing	2
Orientation to college	2

13. What is the highest educational level you have completed?

14.7% Undergraduate Degree Freq. 5

61.7% Master's Degree Freq. 21

23.5% Doctoral Degree Freq. 8

14. Are you teaching or providing services to learning disabled students on campus?

90% Yes (Freq. 28) 9.6% No (Freq. 3)

If yes, please specify

Tutoring	9
Advocate, diagnosis	2
Word processing	1
Remediation	3
Remedial courses	3
Faculty development	2
Direct program	1
Academic Counseling	1
Referrals	2

Conference: Effective Strategies for the Instruction of Learning Disabled
Community College Students
March 30, 1990

SUMMARY OF RATINGS AND COMMENTS

Note: Numbers in parentheses are frequencies of ratings.

1a. The keynote presentation "Do Learning Disabled Individuals with Writing Problems Differ from Other Poor Writers?" was:

	1	2	3	4	5
	inadequate	fair	good	very good	excellent
Freq.	(0)	(2)	(9)	(11)	(13)

Percentage of ratings 3 or higher = 94% (n=35)

1b. This presentation helped me to understand better the different types of writing problems experienced by learning disabled community college students:

	1	2	3	4	5
	to a very small extent	to a small extent	to a moderate extent	to a large extent	to a very large extent
Freq.	(0)	(2)	(11)	(15)	(7)

Percentage of ratings 3 or higher = 94% (n=35)

1c. The presentation provided useful information about research findings:

	1	2	3	4	5
	to a very small extent	to a small extent	to a moderate extent	to a large extent	to a very large extent
Freq.	(0)	(6)	(9)	(11)	(7)

Percentage of ratings 3 or higher = 82% (n=33)

1d. List some useful ideas that emanated from this presentation.

- ways of diagnosing E.S.L. learning disabled students (2 responses)
- the basic difference between L.D.s and poor writers (3 responses)
- stress on strategies rather than remediation (7 responses)
- computer, word processing
- "PA.A.PA" strategy on handouts (3 responses)
- the letter from 1950s

- preparation for writing activities
- speaker's own experience
- individual case studies

1e. What additional information would you have liked?

- more strategies for learning with LD problems (3 responses)
- how many hours clinicians work with students at Penn State
- strategies; accommodation; PA.A.PA
- more information on success rate of LD students
- re: question 2c above: needed more time
- more information about students from other cultures and language
- how do you evaluate scribing for English courses
- hand held photocopier
- more specific case studies

2a. The presentation "A Three-Tier Approach for Helping Dysgraphic Writers" was:

	1 inadequate	2 fair	3 good	4 very good	5 excellent
Freq.	(0)	(3)	(8)	(10)	(15)

Percentage of ratings 3 or higher = 92% (n=36)

2b. The workshop provided an understanding of screening poor writers for dysgraphia:

	1 to a very small extent	2 to a small extent	3 to a moderate extent	4 to a large extent	5 to a very large extent
Freq.	(1)	(2)	(12)	(14)	(6)

Percentage of ratings 3 or higher = 91% (n=35)

2c. The workshop provided practical suggestions that could be used to work with learning disabled students improve their writing skills:

	1 to a very small extent	2 to a small extent	3 to a moderate extent	4 to a large extent	5 to a very large extent
Freq.	(2)	(0)	(4)	(15)	(17)

Percentage of ratings 3 or higher = 95% (n=38)

2d. List some useful ideas that emanated from this workshop:

- sentence stacking and blocking chunks of words to slow down process of revising (5)
- good practical techniques
- talk write (4 responses)
- strategies for proofreading
- feedback by direct questioning of students
- usefulness of visual presentation of sentences and paragraphs
- emphasis on intuitive understanding rather than terminology and teaching grammar
- the techniques presented to help L.D. students (6 responses)
- necessity of interview (2 responses)
- encouragement to develop creative strategies
- superb presenter, original and well elaborated visual and auditory strategies

2e. What additional information would you have liked?

- more thorough answering of questions
- more information about the tier approach
- more information about spelling techniques
- more specific about how Dr. Kupersmith works with students
- I could have continued the discussion indefinitely
- more time with Kupersmith
- how to deal with more complicated sentences
- specific techniques that have been tried and tested

3a. The workshop "Individualized Remedial Approaches" was:

	1 inadequate	2 fair	3 good	4 very good	5 excellent
Freq.	(0)	(3)	(10)	(10)	(11)

Percentage of ratings 3 or higher = 91% (n=34)

3b. It was helpful to be informed of the results of analysis of questionnaires and writing samples:

	1 to a very small extent	2 to a small extent	3 to a moderate extent	4 to a large extent	5 to a very large extent
Freq.	(1)	(4)	(12)	(10)	(5)

Percentage of ratings 3 or higher = 85% (n=32)

3c. The workshop provided useful information on screening for and remediating writing disabilities:

	1 to a very small extent	2 to a small extent	3 to a moderate extent	4 to a large extent	5 to a very large extent
Freq.	(0)	(1)	(11)	(16)	(4)

Percentage of ratings 3 or higher = 97% (n=32)

3d. List some useful ideas that emanated from this presentation.

- the questionnaire was effective in identifying some areas of L.D. concern
- E.S.L. writing is extremely similar to L.D. writing
- flow chart, mapping (3 responses)
- writing as communication (2 responses)
- writing samples
- many positive strategies; Pat Anderson is an excellent speaker
- some of the errors used to detect some kind of problems
- great approach of eliciting information through questioning

3e. What additional information would you have liked?

- some discussion on the research project
- how to teach writing effectively
- too long on results that were insignificant
- how to help each student individually
- when do you stop helping a student who is so deficient that college is over his head
- how can you diagnos L.D. students. Is there a form used to assess L.D. students through their writing

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4. To what extent did the conference meet your expectations?

	1 Not at all	2	3	4	5	6	7 to a great extent
Freq.	(0)	(3)	(0)	(3)	(3)	(16)	(11)

Percentage of ratings 4 or higher = 83% (n=36)

5. How would you rate the conference as a useful and productive experience?

	1 Not at all	2	3	4	5	6	7 to a great extent
Freq.	(0)	(3)	(0)	(2)	(4)	(13)	(14)

Percentage of ratings 4 or higher = 86% (n=36)

6. What did you like most about the conference?

- hands-on by Kupersmith (3 responses)
- practical techniques (Pat Anderson) (2 responses)
- opportunity to see writing samples in the afternoon
- discussion with other teachers (3 responses)
- review of papers from the students (2 responses)
- comfortable room
- nice blend of approaches, techniques of practice and research
- wonderfully helpful handouts
- practical suggestions and concrete examples (2 responses)
- good presenters
- strategies for writing
- Kupersmith's presentation
- all the new insights about the subject, especially the strategies to be used

7. What did you like least about the conference?

- the results of the questionnaire could have been summarized (2 responses)
- hands-on workshop
- more time for each presenter or small group discussion
- not enough time for questions after presentation
- redundant
- Dr. Kupersmith's presentation was hard to follow; it needed visual reinforcement
- Dr. Perin's presentation simply because it was not valid and reliable

8. What would you like to see included in future conferences?

- more strategies for dealing with LD in classrooms (3 responses)
- workshop on "comprehension of LD students"
- more of the same would be wonderful
- constructive criticism of students' essays
- more hands-on techniques for remediation
- more on computers
- psychosocial behavior of LD students
- more successful techniques to use with LD writers (2)
- the writing/reading connection
- research issues: where we've been, where we are, where we'ere going in this field

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Demographic Information

9. For how many years have you worked in a community college:

24%	0-2 years	Freq. 9	(N=37)
35%	3-5 years	Freq. 13	
11%	6-10 years	Freq. 4	
3%	11-15 years	Freq. 1	
27%	16+ years	Freq. 10	

10. What department do you work in?

Department	# of Responses
Engish	10
Special Education Servioces	10
Disabled Student Services	4
Learning Resource Center	2
Conseling Center	3
Student Support Services	3
Developmental Studies	2
Student Development	3
Alternative Learning	1
Human Services	1
Humanities	1
Learning Project	1
Communication Skills	1
College Skill	1

11. What is your present position?

Directors, Coordinators and Deans of:

• Disabled Student Services	3
• Tutoring Center	1
• Vocational Skills	2
• Learning Disabilities Programs	3
• Writing/ESL	1

Counselors and Learning Disabilities Specialists: (14)

Professors, Instructors, Teachers and Tutors: (19)

12. What subjects are you currently teaching?

English	9
Writing	9
Math	3
Biology	1
Chemistry	1
Social Science	1
Basic Reading	4
Job Search	1
Vocational counseling	2
Communication Skills	1
Orientation	1
English as a Second Language	1

13. What is the highest educational level you have completed?

14% Undergraduate Degree Freq. 5

72% Master's Degree Freq. 26

14% Doctoral Degree Freq. 5

(N=36)

14. Are you teaching or providing services to learning disabled students on campus?

88% Yes (Freq. 28) 12% No (Freq. 4) (N=32)

If yes, please specify.

- work on a one-to-one basis with students
- tutor for L.D. students (5 responses)
- tutoring, remedial work in English writing, scribe
- counseling, information service, teach strategies
- L.D. screening, advocacy and liaison with faculty
- coordinator of services for L.D. students, tutor
- primary supplementary instruction and remediation
- diagnosing and developing ways to help L.D. students
- vocational counselor (3 responses)
- general support services to L.D. students
- use word processor, tape recorder (2 responses)
- self-advocacy training and accommodation
- referral for testing and evaluation
- accommodation, counseling, diagnosis, tutoring
- one-on-one conferencing
- informal testing and teaching
- remedial services

Instructing Students with Learnimg Disabilities:
Guidelines for Community College Faculty and Support Staff

Conference Proceedings

Edited by: Dolores Perin, Ph.D.

Institute for Research and Development
in Occupational Education
Center for Advanced Study in Education
The Graduate School and University Center
of the City University of New York

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Table of Contents

Page

Acknowledgements i

Presentations Summarized ii

Introduction 1

Applying Learning Disabilities Research in the Community College Classroom 5

Identifying Learning Disabled Students in the Classroom: Typical Profiles 7

Distinguishing Language Problems from Learning Disabilities in Students with Limited Proficiency in English 11

Implications of Theories and Research Findings for Instruction and Accommodation of Learning Disabled College Students 15

Innovative Teaching Strategies for Students with Learning Disabilities 19

Understanding a Learning Disabilities Evaluation and its Implications 21

Are all Reading Problems the Same? Implications of Research for Learning Disabled Community College Students 25

Providing Services On and Off Campus for Learning Disabled Students 29

Learning Disability or Learning Difficulty: How Do We Tell the Difference? 37

Procedures and Practices on Campus for Referring Learning Disabled Students for Services 43

Writing Skills Instruction and the Learning Disabled Community College Student: Research and Practice 49

Specific Instructional Strategies to Help Students with Learning Disabilities Develop Writing Skills 55

Do Learning Disabled Individuals with Writing Problems Differ From Other Poor Writers? 61

A Three-Tier Approach for Helping Dysgraphic Writers 66

The Writing of Community College Students: Comparison of Students with and without Self-Reported Learning Difficulties 71

Selected References on Learning Disabilities 77

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Presentations Summarized in this Proceedings*

December 5, 1986

Frank Vellutino, Ph.D., Child Research and Study Center, State University of New York, Albany. Applying Learning Disabilities Research in the Community College Classroom.

Kate Garnett, Ph.D., Department of Special Education, Hunter College of CUNY. Identifying Learning Disabled Students in the Classroom: Typical Profiles.

Jacqueline Jones, Ph.D., Department of Specialized Services in Education, Lehman College of CUNY (currently at Educational Testing Service, Princeton, NJ). Distinguishing Language Problems from Learning Disability in Students with Limited Proficiency in English.

March 27, 1987

Jeanne S. Chall, Ph.D., Graduate School of Education, Harvard University. Implications of Theories and Research Findings for Instruction and Accommodation of Learning Disabled College Students.

Craig Michaels, M.A., Human Resources Center, National Center for Employment of the Disabled. Innovative Teaching Strategies for Students with Learning Disabilities.

Jeffrey Rosen, Ph.D., Division of Social Science, City College of CUNY. Understanding a Learning Disability and its Implications.

December 4, 1987

Charles A. Perfetti, Ph.D., Learning Research and Development Center, University of Pittsburgh. Are all Reading Problems the Same? Implications of Research for Learning Disabled Community College Students.

Anthony Colarossi, Ph.D., Special Services Program, Kingsborough Community College; Margaret Gioglio, M.S., The Learning Center, State University of New York at Farmingdale and Human Resources Center; Karen Pearl, M.S., The Learning Project, LaGuardia Community College of CUNY (currently at the Literacy Assistance Center, New York City). Panel Presentation: Providing Services On and Off Campus for Learning Disabled Students.

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*In the order in which they were presented.

March 18, 1988

Barbara Cordoni, Ed.D., Department of Special Education, Southern Illinois University at Carbondale. Learning Disability or Learning Difficulty: How Do We Tell the Difference?

Sydney Becker, Ph.D., Basic Education Department, Nassau Community College of SUNY; Joann Mischianti, M.S., Student Support Services, New York City Technical College of CUNY; Golda Solomon, M.A., Speech, Theater and Communication Arts Department, Borough of Manhattan Community College of CUNY. Panel Presentation: Procedures and Practices on Campus for Referring Learning Disabled Students for Services.

December 8, 1989

Susan Vogel, Ph.D., Educational Psychology, Counseling, and Special Education Department, Northern Illinois University. Writing Skills Instruction and the Learning Disabled Community College Student: Research and Practice.

Patricia Anderson, M.S., Northeast Technical Assistance Center for Learning Disabled College Programming, University of Connecticut. Specific Instructional Strategies to Help Learning Disabled Students Develop Writing Skills.

March 30, 1990

Anna Gajar, Ph.D., Department of Special Education, Pennsylvania State University. Do Learning Disabled Individuals with Writing Problems Differ from Other Poor Writers?

Abraham Kupersmith, Ph.D., English Department, Borough of Manhattan Community College of CUNY. A Three-Tier Approach for Helping Dysgraphic Writers.

Dolores Perin, Ph.D., Center for Advanced Study in Education, CUNY Graduate School. The Writing of Community College Students: Comparison of Students With and Without Self-Reported Learning Disabilities.

Instructing Students with Learning Disabilities: Guidelines for Community College Faculty and Support Staff

CASE/IRDOE Conference Proceedings

Edited by Dolores Perin, Ph.D.

Introduction

The typical American college professor encounters, in every 100 students taught, a few who seem to be at least adequate as analytical thinkers and make thoughtful contributions to class discussions, yet whose grades on tests and essays are very poor. Of course, large numbers of college students experience difficulty fulfilling course requirements and, in many cases, the difficulties can be explained by inadequate educational preparation for college, or intellectual, cultural, social, or emotional factors. In some instances, sensory impairments or limited proficiency in the English language may explain academic difficulties. However, when none of these factors are found to be sufficient reasons for serious academic problems, the cause is probably a learning disability.

Approximately 3.53% of six- through 21-year-olds receive special education services on the basis of a diagnosed learning disability (Eleventh Annual Report to Congress, 1989). It has been estimated that 1.3% of students in postsecondary institutions, covering the range from less than two-year institutions requiring high school diplomas, to graduate level education, have learning disabilities (Greene & Zimbler, 1987). Since individuals with learning disabilities often have histories of low grades, they may be overrepresented in community colleges in comparison with four-year institutions. Indeed, Murphy (1986) cited studies estimating the incidence of learning disabilities to be 0.6% in four-year colleges compared to 7% for community colleges.

As mentioned above, reasons other than learning disabilities may account for academic failure. In cases where levels of intellectual functioning are relatively low, some students may have been labeled "slow learners" or "underachievers" in the past. Such students have learning needs that are quite different from those with learning disabilities (McGuire & Shaw, 1990) and are sometimes referred to as "severely learning disabled." They may have been able to obtain high school diplomas but may not be able to comprehend college level material although they may have successful non-credit educational or training experiences (Perin, 1990).

In contrast, "classically" learning disabled students have average or above intellectual ability and, while they demonstrate serious academic problems, they can succeed in college programs, given appropriate types of instruction and support. In urban, open admissions systems such as the City University of New York (CUNY) and the State University of New York (SUNY), faculty have increasingly felt the need to understand learning disabilities, especially in order to distinguish them from the other factors that could explain academic failure.

In answer to this need, the CASE Institute for Research and Development in Occupational Education (CASE/IRDOE) of the CUNY Graduate School conducted faculty development activities in the area of learning disabilities. These activities, supported by the New York State Education Department under the Carl Perkins Vocational Education Act,[1] were provided for faculty and support staff in CUNY and SUNY community colleges in the New York City metropolitan area.

The activities focused on the first and third of the three objectives of staff development described by Guskey (1986): change in teachers' classroom practices, change in student learning outcomes, and change in teachers' beliefs and attitudes, on the assumption that these would result in the second objective. In a series of full-day faculty conferences, presentations were made on issues covering a spectrum from theoretical to practical. Researchers presented overviews and findings of studies, and faculty and service providers described specific instructional strategies and support services appropriate for community college students with learning disabilities. As a result, participants became more aware of teaching methods they could implement themselves, and of information that they could use in developing their staff development activities.

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[1] VEA Grant Awards #152-87-3758 (10/1/86 - 9/30/87); #152-88-7173 (10/1/87 - 9/30/88); #152-89-5153 (10/1/88 - 9/30/89); and #152-90-1923 (10/1/89 - 9/29/90), Office of Occupational and Continuing Education, Bureau of Grants Administration, The New York State Education Department, University of the State of New York.

In some cases, college faculty are resistant to working with students with learning disabilities, either not believing in the phenomenon itself, or not believing that college is an appropriate place for them. It was intended that conference participants, who tended to have highly positive attitude towards working with students with learning disabilities, would be able to counter such negative beliefs on campus by communicating information they learned in the conferences.

Summaries of the presentations made over several years of faculty conferences were prepared by staff of CASE/IRDOE, which is responsible for the contents as expressed. These "Proceedings" may be read by conference participants who wish to refamiliarize themselves with the material presented. Further, the material is also intended to be a resource for community college faculty and support staff both in working directly with students with learning disabilities and in conducting staff development activities on campus.

Another product of the faculty development projects that can be used on campus for staff development is a set of videotape materials, "Instructional Strategies for Learning Disabled Community College Students (see Appendix for further description). The videotapes could be used in conjunction with these Proceedings.

Applying Learning Disabilities Research in the Community College Classroom

Presenter: Frank Vellutino, Ph.D.
Child Research and Study Center
State University of New York, Albany

Date of Presentation: December 5, 1986

Frank Vellutino is involved in research on the cognitive and linguistic processes underlying reading ability. He spoke in some detail about the major theories and research in that area and contrasted a number of popular but conflicting theories. He stated that one of the major misconceptions about learning disabilities is the belief that it is a well-defined, readily diagnosed entity. He said that it is not. His review was a critical one, evaluating some theories as more or less viable than others. He described several of his own research studies and explained his own theories about the cognitive and linguistic processes underlying reading ability and reading disabilities. He spoke of two conceptual distinctions which are useful in understanding and ordering the various theories and definitions of learning disabilities.

The first conceptual distinction was between general aptitude and specific aptitude. Many definitions of learning disability say that a person may only be called learning disabled if he or she is of high IQ (considered a measure of "general aptitude") and that his or her disability is a separate "specific" aptitude problem. Vellutino discussed some of the problems inherent in that approach.

The second conceptual distinction was that between ultimate and immediate causes of learning disability. Ultimate causes refer to genetic, maturational, neurological, or developmental factors—things "built into the system." Basic process deficits have been postulated in the following areas: perception, cross-modal transfer, intersensory processing, central auditory processing, attention, and sequencing. These are all basic difficulties in learning but rather than being particular to reading, may be involved in all learning. In his review of the research literature, Vellutino discussed various theories which attempt to explain learning disabilities in terms of certain ultimate causes. He was particularly critical of some of the old, traditional hypotheses about learning disabilities, such as that the problem is associated with optical reversibility--seeing letters in reverse.

Immediate causes refer to problems in the development of basic skills (as opposed to basic processes) in a particular domain. He defined a basic skill as a skill that is a prerequisite for acquiring knowledge in a given domain. For example, in the case of reading disability, these are language related skills such as sight vocabulary, ability to recognize words quickly and automatically, ability to decode phonetically to make use of context, to make inferences, etc. Vellutino claimed that language is a critical basic skill for learning in general, and not just for learn to reading. "Reading disabilities are language disabilities," he stated.

Vellutino stated that while studying basic processes or ultimate causes of learning disabilities is legitimate for the research laboratory, it is not practical for the educational setting. In the educational setting it is better to invoke the immediate causality definition of learning disabilities and to focus on the basic skills deficiencies in areas that are required for learning. In addition, researchers can learn a great deal from the practical attempts which work on the immediate causality level.

He proposed that the best way to help a student is to define the skill the student is deficient in, that is, the basic skill that is prerequisite in a particular area or domain that he or she is pursuing. The skill should then be analyzed in terms of immediate rather than ultimate causes—in terms of underlying skills, rather than basic processes, for example: vocabulary, phonetic decoding skills, sensitivity to grammar and syntax, text processing skills such as inference, advance organizing, understanding story grammars, etc.

He also suggested using mastery and criterion-referenced tests, rather than (or as a supplement to) norm referenced tests. The tests should be designed so that if a student has acquired a particular subskill he or she should be able to perform at a mastery level on items, but should not be able to perform at the level if the subskill has not been acquired.

Identifying Learning Disabled Students in the Classroom: Typical Profiles

Presenter: Kate Garnett, Ph.D.
Department of Special Education
Hunter College, City University of New York

Date of Presentation: December 5, 1986

Kate Garnett started her talk with some statistics on students diagnosed as learning disabled, figures which are increasing across the country at all kinds of colleges including public institutions and Ivy League colleges like Harvard. She considered the argument sometimes heard, that the category of learning disabled is so broad that it does not describe any real disability. She disagreed with this claim and stated that, although the numbers are large enough to be important, they are not so large as to suggest that significant numbers of college students are being improperly labelled learning disabled. Learning disability is rare, but it is a legitimate disability, she stressed.

Garnett discussed the problem of how to help students whose native language is not English and who appear not to be learning. If the student has received language training and seems to be able to communicate in English, one must ask what else may be interfering with his or her learning.

In such cases, one of the first things to be done (after ascertaining that no physical sight or hearing problem is involved) is to assess the student's level of competence in his or her native language. This is difficult and sometimes impossible, because appropriate tests are not available in all languages. It is also difficult or impossible to test intellectual ability and academic skill level in the native language. Intelligence tests are based upon day-to-day knowledge of things expected to be known to people living in our society. If they can be criticized for being culturally biased against certain groups, then they certainly can not adequately assess the intelligence of a recently arrived immigrant. Therefore, said Garnett, we must think not of intelligence but of performance, and of trying to increase performance ability.

Many students who are conversational in their native language have almost no experience with reading and writing in the academic sense. This is true even for some students who have high school diplomas in their native language-- just as it is true for many English speaking high school graduates. When they are called upon to read or write academic subject matter in English, they therefore face a double difficulty: they are being asked to do in English what they cannot do in their own language. This is difficult, frustrating, and anxiety-provoking for them.

Garnett proposed that colleges counsel these students and help them to make a decision about whether to keep trying. She stated that many students are unaware of the extent of their skills deficits. Often they "get through" many credits without realizing it, until someone finally--and suddenly--confronts them with the seriousness of their problem. This can be devastating for students, and it was suggested that we may be doing students a disservice by letting them "get by" in many subject area courses without having to demonstrate reading and writing skills.

Garnett then went on to discuss certain kinds of problems that interfere with the learning of both non-native and native English-speaking students. These are problems which can be quite successfully compensated for, if not always eliminated, and include difficulties in problem solving and organization of work and study.

Many students, even if they understand the English language, have trouble generating solutions to problems--generating multiple hypotheses and finding efficient ways to test them. This is often particularly true of students with real language impairments and may be evidenced in either writing or reading or both. In writing, for example, grammar and punctuation may be reasonably good, but the ideas, even good ideas, are not organized. Some students seem to have difficulty in taking into account the perspective of the reader when they write.

In the subject areas, many students do not know how to organize facts in some meaningful way in order to be able to memorize them. Instead they try to memorize a set of unorganized, separate facts, a task even the best learner would have trouble doing.

Some suggestions to help students with organizational problems were:

- subject-area instructors should give students an outline at the beginning of the semester and of each class session. Professor Garnett pointed out that up until college, teachers do a lot of structuring for the students, and students are then expected to do this on their own in college, with no transition. College instructors should continue to outline and organize, if possible in ways that will show and encourage students gradually to do this more by themselves.

- Tutoring services should teach students how to organize academic material.
- Students should be taught what kinds of questions to ask to make things clearer to themselves. Often they are confused and don't know what information to ask for or why they should ask.
- Students should be taught to ask the instructor what topics will be covered that day; in other words they must learn to ask for the organization they need.

Garnett discussed how the college or university can organize its services for learning disabled students. Most important is inter-departmental coordination in determining student needs and coordinating available services. Also important is keeping track of how students are progressing from semester to semester. There must be an ongoing process of testing and evaluating, teaching, testing and evaluating, teaching. Finally, she discussed the value of peer discussion, support or "rap" groups as an esential part of any services for special needs students.

Distinguishing Language Problems from Learning Disabilities in Students with Limited Proficiency in English

Presenter: Jacqueline Jones, Ph.D.
Department of Specialized Services in Education
Lehman College, City University of New York*

Date of Presentation: December 5, 1986

Jacqueline Jones began her presentation with a discussion of one of the key problems in evaluating and teaching learning disabled students with limited English proficiency. This concerned the extremely wide variation among these students in their degree of learning disability and in the level and nature of their competency both in English and in their own language. There are some students who have only conversational skills in both languages. Students also vary in levels of literacy in their native language. Some have done sophisticated reading and writing in that language, and some have not.

Limited English language skills in and of themselves are not evidence of learning disabilities. An English language "disability" must be distinguished from a language disability. Unfortunately, it is very difficulty to evaluate limited English proficiency students for learning disabilities since it is often difficult to distinguish the limited English skills from certain learning disabilities. There is a risk of either falsely diagnosing a learning disability when the problem is really one of English language skills or of missing a real learning disability, including a language disability, because it is assumed that the problem is just the limited English proficiency.

In many cases there are no staff available who speak the student's native language. In addition, appropriate assessment instruments are often not available. For example appropriate assessment instruments do not exist that assess the listening comprehension skill of a student who speaks Korean. Further, while tests of auditory discrimination are usually part of a learning disabilities evaluation, it is usually inappropriate to give one in English to limited English proficiency students, since they are being asked to distinguish English language sounds with which they are not familiar. More appropriate, Jones suggested, would be the use of non-language auditory acuity tests.

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*Dr. Jones is currently at Educational Testing Service, Princeton, NJ.

Once a student's basic auditory and visual acuity has been tested, the next step in assessing a student is to ask him or her how he or she experiences the problem. This may provide a better diagnostic description than would a standardized test score, even if one does not find out if the student has a specific learning disability. Jones suggested a series of questions to ask a student who is having difficulty in a class. Talking with the student about the problem allows the interviewer to get some sense of the student's language proficiency, at least in English. The student should be asked the same basic learning disabilities screening questions as one would ask a native English speaker, concerning family history, history of school achievement, whether current problems are generalized or erratic, etc. Also, the student should be given a chance to explain what he or she thinks his or her difficulties are and what is causing them.

With probing, some students can tell an instructor in which ways materials must be presented for them to understand information. For example, some students prefer to read and write in English, despite their limited proficiency, because they have little or no experience in academic reading and writing in their native language. Other students may need the instructor to write on the board or need a clear outline.

There is evidence that language-impaired students have difficulty solving problems that require generating and considering multiple hypotheses. Many of these students have organizational problems, both on a verbal and a non-verbal level. This kind of information can serve as a useful guide for the instructor. The instructor can teach strategies for learning, such as how to create an organized conceptual framework to cut down on the need for rote memorization and replace it with organized, meaningful memory. Also, limited language skill students often require that information be presented in a more linguistically simple way.

For their part, students need to learn how they learn and what kinds of questions to ask the instructor. Tutors must be trained to teach students these skills, and not only course subject matter.

Jones spoke of considerations in evaluating student progress in class. The instructor, she suggested, must ask herself what the goal of the class is, what information she wants the students to master, and how students with limited Englsih language skills can demonstrate their knowledge. Often tests can be presented in a linguistically simpler way but cover the same content. Further, some students can be given an oral rather than written exam. In addition to suggestions for the individual instructor and for tutors, Jones spoke of the need for coordination of all services on campus.

Implications of Theories and Research Findings for Instruction and Accommodation of Learning Disabled College Students

Presenter: Jeanne S. Chall, Ph.D.
Graduate School of Education
Harvard University

Date of Presentation: March 27, 1987

Jeanne Chall discussed the relationship between reading, language skills, writing, and spelling. She pointed out that the problem of learning disabilities is not limited to public universities or colleges with large "inner city" populations. In fact, learning disabilities are found among students from a wide spectrum of backgrounds, and at all kinds of colleges, including, she mentioned, her own, Harvard.

Although definitions of learning disabilities vary, Chall offered the following definition: functioning in reading and writing below what one's level should be, based on cognitive ability. In other words, a learning disabled student is "smarter" than his or her school performance.

Chall referred to her stage theory of reading development and explained how it can be useful in understanding both the reading and writing difficulties of youth and adults, although the theory was based on an analysis of children's reading development alone.

Before distinguishing the stages of reading development, she listed three requirements for reading at all stages.

1. Language and knowledge
2. Cognition: reasoning and thinking skills
3. Reading skills such as recognizing and sounding out words, finding main points, and grammar.

Although these must be present at all reading stages, they change, and the relationship between them changes as one goes from lower to higher reading stages, so that, in fact, reading is a very different process at different stages.

She then defined and described each of the six stages in her well-known theory of reading. Chall claimed that the major problem in reading for community college students is that the average student is at and sometimes below the eighth grade reading level. She cited studies which showed, for example, that 20% of California community college students were reading at or below the fifth grade level and that only 40% of first year students at a midwestern state community college read "adeptly," well enough to read a college textbook. Less than 20% of Black students and even fewer Hispanic students were at the "adept" level. The "adept" level corresponds to Stage 4.

Chall stated that students reading at or below a sixth or seventh grade level need *expert* help from *trained professionals*. They need more help than the subject area instructor or a peer tutor, for example, can give. However, students reading at around the eighth grade level can be greatly aided by subject area instructors, who can, with the correct methods, help them make the transition from eighth to twelfth grade reading in a relatively short period of time.

To explain how this can be done, she first discussed the characteristics distinguishing eighth from twelfth grade development of the three basic requirements in reading described above.

1. Language and knowledge: twelfth grade texts require language that is complex, abstract, and technical. Doing assignments from these texts requires bringing to the text much background knowledge and vocabulary, which are not as necessary for most ninth grade reading level texts.
2. Cognition: twelfth grade texts require a greater ability to read critically, and more highly developed cognitive and problem solving skills.
3. Reading skills: More advanced reading skills are needed, including greater speed, efficiency, knowing what the important ideas are, and metacognitive skills such as knowing whether one is comprehending or not.

Chall stressed that these three areas are interrelated. For example, in a literate society, the more intelligent one is, generally the better a reader one is. However, the converse is also true--the better the reader the more intelligent the person. She argued that the ability to read contributes to intelligence. In other words, good reading skills improve the ability to think. There is evidence that when a person goes from the eighth to the twelfth grade reading level his or her thinking changes in ways corresponding to the differences in the kinds of reading done at those levels. Therefore, content area teachers at the college can help their student to read and improve their reading by helping them to *think better* about the *subject matter*. In fact, many of the current procedures for teaching thinking and teaching higher level reading are quite similar.

Of the three basic requirements of reading, she placed greatest emphasis on the first one. There is strong evidence that in general, and not just in reading, knowledge of a subject area is the greatest factor in expertise. She also cited specific evidence that what most distinguishes a novice from an expert reader is background knowledge and vocabulary. Even for a generally good reader, the areas in which one reads most quickly and effectively are the areas one knows well.

Based upon this evidence and her analysis of it, Professor Chall argued that general reading skills courses that are not related to any particular subject matter are not sufficient. Reading is not just a technique or process; it must have content. Therefore, the subject area instructor is in a unique position to improve students' reading by helping them to deal better with texts of specific content. They can prepare students for reading the text by presenting necessary background knowledge and vocabulary in advance. Some specific suggestions included:

- List vocabulary words on the board and discuss them in advance.
- Tell the students what the important ideas in an upcoming reading assignment are.
- Ask questions in advance of the reading which will help students see where the main ideas in the chapter are.
- Teach students some "tricks" for reading and writing in each subject area. Instructors can best do this by modeling for students how they can approach reading and writing in each subject area. This should include the following procedure in all classes: The first day, the students should bring the text to class and should be "initiated" into the book. What is the author's style? Where are the main ideas? How should it be read? Should they read the summary first? Subject headings first?

In addition to her theoretical analysis and these practical suggestions, Chall discussed some of the social policy issues implicitly raised by her analysis. She expressed a conviction that all our youth must learn to read at the twelfth grade level. In 1940 few jobs required more than an eighth grade reading level. Today many more jobs require a twelfth grade reading level. Even many jobs that do not call for reading on a twelfth grade level require higher reasoning, which comes in part from higher reading. Also, in order to be truly equal participants in the affairs and decisions of our society people must be able to read such things as articles on world affairs in Time, Newsweek, or the New York Times, which are difficult for a person with only an eighth grade reading level. She insisted that this is not an elitist, but a democratic, postion: What's good for the college professor's daughter or son is not too good for anyone's child.

She went on to say that the reasons for the low literacy levels in our society are complex, and many are beyond the responsibility of the college faculty. However, there is much that they can do. When students learn to read better in any area, they begin to find reading less torturous; this makes them more independent in their learning and gives them greater power over the written word, and it gives them a way to continue to learn when they leave college.

In concluding, Professor Chall offered a summary of her major points, which were the following:

1. Remedial reading is important, and should be done by trained experts.
2. Students reading below sixth or eighth grade level need much more systematic work on their thinking skills.
3. Using easier textbooks is one possible approach, but it is a temporary and limited approach because: (a) there are simply not enough of them, and (b) they do not help bring students up to the higher reading level that they need in our society.
4. Students should be taught some "tricks" in each subject area course; these are best taught by subject area instructors who can model these "tricks" for the students. Subject area faculty must be oriented towards doing this and helped to learn methods.
5. The most important way to help students is to help them to expand their vocabulary and knowledge in the subject they are reading.

Innovative Teaching Strategies for Students with Learnig Disabilities

Presenter: Craig Michaels, M.S.
Human Resources Center, National Center for Employment of the Disabled, Albertson, NY

Date of Presentation: March 27, 1987

Craig Michaels began his talk by raising the issue of whether there can be good teaching without learning. He expressed the view that if students are not learning, it is the responsibility of the teacher to change his or her teaching so that students do learn. Although this principle is accepted at the elementary and secondary school levels, it is not widely accepted at the college level.

Michaels proceeded to offer a set of specific suggestions for college instructors of learning disabled students. However, he stressed that the suggestions would be useful for all students; a good teacher for the learning disabled is a good teacher for any student. Proposed techniques must also be easy for the instructor to implement; if they take too much time the instructor is less likely actually to use them.

Many of the suggested teaching techniques concerned providing organization and structure for students.

- All teachers should make the course syllabus available to students prior to the start of class. This would help organize the course for students, and is essential for those learning disabled students who qualify for recordings for the blind. They need to know what text will be used in advance in order to get it on tape.
- The syllabus should include learning objectives and specification of how students will be evaluated or tested.
- Before each topic and each lesson, students should be told what they will be learning and what the important points are.
- Many learning disabled students have great trouble articulating the "main idea" or summarizing. At the end of each topic and lesson, the instructor should summarize the key points. He or she should try to elicit the main ideas from the students, but should do this for them if necessary. This will serve as a model for some, who may learn how to do it themselves.

- The instructor should review the main points of the previous class at the beginning of each class.

Many students have trouble knowing what to write down during the class and from the text. They may try to write down everything or may write down the wrong things. The above techniques may help them learn to find the main points, but in addition Michaels suggested that the instructor should help them learn how to study from a textbook, and offered the following specific technique:

- Teach the students to read the chapter prior to the lecture and take notes along one side of the paper. Then in class as they listen to the instructor they should find the place in the notes where the teacher is and on the other side of the paper, next to that part in the notes from the text, write down anything the instructor adds, or makes notes of what the instructor stressed, disagreed with, etc.

Regarding modification of exams for learning disabled and other disabled (such as blind) students, the general guiding principle should be to distinguish between whether the student has learned the subject matter of the course and whether he/she has some disability. He presented examples of some reasonable accommodations that can be made in testing:

- Give untimed tests. Mark down where the student was at the normal time limit, and then let him or her finish the test.
- Provide alternate test forms.
- Allow learning disabled students who cannot fill out computer answer forms to circle the answers on the test itself.
- Especially for math, analyze how the student did the problem and give partial credit for correct solution mode even if the answer was wrong.
- Simplify directions.
- On a case-by-case basis, provide aids and assistance devices, such as a multiplication table.

In concluding, Michaels stressed again that learning disabled students are not very different from other community college students. The good teaching techniques that help the former will help the latter. The difference is that while the non-learning disabled student may "make it" anyway, the learning disabled student cannot succeed without the instructor's help.

Understanding a Learning Disabilities Evaluation and its Implications

Presenter: Jeffrey Rosen, Ph.D.
Division of Social Science
City College, City University of New York

Date of Presentation: March 27, 1987

Jeffrey Rosen described the learning disabilities service he was directing at City College of CUNY, where evaluations were performed. This was a training activity for doctoral students in the Clinical Psychology and Cognition Ph.D. programs at City College. From four to six students per year participated in the service, supervised by three faculty. Referrals were received from anywhere in the CUNY system, for example from community college faculty. The person making the referral received an evaluation of what was wrong with the student and also recommendations to promote academic improvement.

A minority were self-referred. Most referrals were made by counselors and teachers. A common reason for referring a student was that a strength was discerned despite the fact that the student was on the verge of failing. Approximately 500 college students from all over CUNY had been seen since 1978, when the service began. All students seen were experiencing profound academic difficulties, although only 50 percent were clearly academically deficient.

Rosen presented statistics that were representative of the people who were seen by the service, although they were not representative of the CUNY student population. The percentages reported by Rosen (see below) added up to more than 100% because students evaluated often belonged to more than one of the categories described.

Fifty percent of the people seen were academically deficient. Everybody who was learning disabled was academically deficient but not everybody who was academically deficient was learning disabled. There were many people who for a variety of reasons did not learn. Some reasons may have been truancy, institutional indifference, and poor teaching. For various reasons, these people simply had never acquired the lexical information that they needed, including vocabulary, orthographic and phonological correspondences, syntax, and organization necessary for academic functioning. It was not that they could not acquire these skills--it was just that they had not acquired them or they had been miseducated. For example, an individual who was taught to read without any knowledge of phonics may not be able to sound out unfamiliar words. The errors such an individual might make might resemble dyslexic errors but the individual may only be miseducated rather than dyslexic. It was very important to distinguish between deficiency and disability. Someone who was deficient could be instructed using standard procedures.

Approximately 10% of students evaluated had academic difficulties associated with hard neuropathology, including epilepsy, multiple sclerosis, tumor and, most commonly, closed head injuries, e.g., concussion and coma. Available school records were examined to see whether there was any precipitous drop-off that could not have been predicted other than as a consequence of that particular neurological insult. In carrying out a clinical evaluation it was necessary to rule out an acute progressive process, i.e., "something that is bad and getting worse" for which there has to be some medical intervention.

Approximately 10% did not have hard neuropathology but needed medical attention because they may have had a systemic illness, e.g., asthma, anemia, mononucleosis, etc. which had been undiagnosed and was interfering with their cognitive abilities. Many of these individuals did not have access to health care delivery systems in the same ways that other people did. After the condition was treated and went away, the student's cognition and academic performance improved.

Approximately 15% had sensory impairments in hearing or in vision. A very detailed evaluation of these functions was conducted to rule out sensory impairment as a reason for academic failure.

Approximately 20% had moderate to severe psychopathology such as a profound anxiety disorder, which affected ability to sustain attention and concentration. Affective disorders were also seen, frequently depression, which impacts upon memory and concentration. Once the psychological problem was rectified, it was possible for the academic problem to disappear.

Approximately 25% had academic difficulties associated with substance abuse, the most common of which was alcohol, although abuse of angel dust, heroin, and cocaine was seen. A very marginal learning disability such as mild form of dyslexia could be severely exacerbated by marijuana so that performance on a reading task would decline significantly.

Approximately 40% were probably developmentally disabled from the first year of life. They had developmental learning disabilities of the following four types:

1. Dyslexia: a specific learning disability associated with reading problems. There are three to six different types of dyslexia. They are all related to reading problems but come about for different reasons, in the same way as a fever can be generated by different causes. The characteristic most frequently associated with dyslexia in people's minds is letter/spatial reversal, for example mirror image letters and words. In fact, this is one of the least prevalent forms of dyslexia.

   The most frequent form of dyslexia involves an impairment in phonological processing. This can be described as a "tin ear for language." Even at the age of two years old there is difficulty discriminating between speech sounds, but nothing that an audiologist could detect. Such individuals have difficulty processing acoustic information rapidly enough to understand everything someone says to them. It may seem that the individual is not paying attention but the problem is one of language processing. Besides having reading problems, students report having difficulty understanding what is being talked about in class. They can understand if the rate of speech is slowed down or if speech is organized into preset patterns. Dyslexics with a phonological impairment may have difficulty using the right words for the ideas they want to express and may show circumlocutions. These problems also show up in writing, which can be poor as a result of trying hard to express meaning while lacking the right words. Such students may have the meaning they want to communicate but may lack its phonological representation. In reading, a person with phonological dyslexia may mispronounce words.

   Another form of dyslexia, which is rare, involves semantic substitutions in reading. Such individuals can read words correctly out loud but their comprehension is poor.
2. Dyscalculia: primary difficulties in math especially in computation involving an underlying logic of spatial extension.

3. Agraphia: problem with writing that does not co-occur with a reading problem. This is very rare outside of a neurology service.
4. A history of hyperactivity/attention deficit--such students may not be hyperactive anymore (although they may be fidgety), but have difficulty with concentration and organization. They have difficulty thinking through a sequence. In writing, spelling, grammar and vocabulary may be excellent but there will be an absence of organization of sentences and paragraphs.

After the evaluation was complete, a treatment plan was developed based on what were considered to be the most important reasons for the student's academic failure. A treatment plan could involve medical referrals, ophthalmology, or psychological consultation. Usually a series of interrelated treatments was planned to deal with the several sources of the academic problem.

Are all Reading Problems the Same?
Implications of Research for Learning Disabled Community College Students.

Presenter: Charles A. Perfetti, Ph.D.
Learning Research and Development Center
University of Pittsburgh

Date of Presentation: December 4, 1937

Charles Perfetti has conducted a large amount of research into the cognitive processes employed in reading. He has studied reading problems in elementary and intermediate school children and recently he has begun investigating the nature of reading problems of low-achieving college students. He reviewed and discussed instructional implications of the research. He cautioned that a gap exists between laboratory-based research and practical application.

Perfetti focused on generally accepted research findings in the field of reading. He suggested that it is important to recognize that there is a great similarity in the nature of learning problems of elementary school level children and community college level students who are poor readers. The major difference between poor readers at the community college level and poor readers at other school levels is that the community college students have had more time and more opportunity to compound learning problems than the other students.

It was emphasized that research on learning to read supports the contention that there are at least three prerequisites on the part of the learner. These prerequisites include mastery of basic language skills, prior knowledge of information presented in the text, and metacognitive strategies for processing the information.

The first prerequisite, mastery of basic language skills, is the most fundamental of these requirements. The student who fails to acquire basic language skills not only learns differently from other students but also learns less. At the community college level this student is less likely to have learned the kinds of things that an academic textbook requires of the reader. Such a student is less likely to have learned about how strategies have to be modified as a function of the text being read, i.e., metacognitive processes are deficient.

Some of the research that has investigated the role of basic language skills in effective reading was reviewed. Basic language skills include word recognition, decoding, memory for spoken language, and the ability to transform the printed word into something meaningful. Invariably, research studies have indicated that children who are poor readers have weak word identification skills. Oftentimes, this weakness becomes apparent only in a laboratory setting in which the amount of time or the effort expended in recognizing the words is measured. Additionally, findings from studies using a camera that films what the eye is doing while reading indicate that eye contact with individual words is essential in successful reading. If the reader cannot handle the words, then he or she is not going to understand the text.

The importance of prior knowledge, the *second prerequisite* for successful reading, was demonstrated by Perfetti utilizing two exercises from the research literature. He presented a well-known example by Bransford and Johnson of step-by-step instructions for performing a common activity. After being given the instructions by Perfetti, the conference participants were unable to identify the activity. However, when he presented the title 'Washing Clothes,' participants were amused at how straightfoward the instructions now seemed. Perfetti likened this experience to that of community college students who sit down to read a biology text, a chemistry text, or a psychology text but have no prior knowledge of the content area of these texts.

Another research example was given to illustrate how one's prior experience can influence one's interpretation or comprehension of text. An ambiguous passage that could be interpreted in one of two ways was read to the participants. The passage could be interpreted as describing either a wrestling match in which a wrestler tries to break out of a body lock, or as describing a prisoner who tries to break out of jail. Perfetti reported that, as would be expected, college students enrolled in physical education departments tended to interpret the passage as a wrestling match whereas students enrolled in education departments tended to interpret it as a prison break. It was thus concluded that the prior knowledge the reader brings to the text will influence comprehension of the text.

The *third prerequisite* for successful reading is the employment of effective strategies or metacognitive processes. Metacognitive abilities operate through the brain's capacity to comprehend information by analyzing, synthesizing and integrating it. Research has found that successful readers have learned to look for important information, to anticipate what should occur next in sequentially presented information, and to distribute cognitive resources efficiently by paying more attention to main ideas and less attention to details. Perfetti stated that many students who are poor readers both at the intermediate and community college levels have no strategy for mastering the text other than to read all the words.

He stated that poor readers may have trouble with one or more of the three prerequisites for successful reading. However, he reported that all poor readers have trouble with basic language skills.

Perfetti next reviewed research that he had conducted with college level students to determine how many different kinds of reading disabilities existed at this level. He distinguished two groups: a group of poor college readers who closely follow a classical pattern of dyslexia and a "garden variety" group that included all other poor readers. The definition of dyslexia that he used was "difficulty in learning to read despite conventional instruction and adequate intellectual and social opportunity, presumed to be dependent on fundamental cognitive disabilities, which are frequently constitutional in nature."

Perfetti raised the question regarding whether he was finding the same phenomena in his studies of poor readers ("garden variety") as other researchers were finding when they studied specific reading disabilities defined very narrowly (dyslexic). He found that across a large number of reading tasks, almost every problem that a garden variety poor reader has is also found in the dsylexic poor reader. In other words, no problems appeared unique to either group of poor readers. He claimed that it would be more useful to stress commonalities that all poor readers have in learning from text than to look for differences between specific subgroups of poor readers. Basically, all poor readers have trouble with basic language skills and they all have trouble remembering what they have just read.

Perfetti concluded his presentation by recommending practical applications of the research findings, including:

1. Do not assume that the adult learner has acquired basic language skills. There is a strong possibility that he or she has not.

2. Be alert for knowledge deficiencies. Not only may a poor reader have basic language problems, he or she may also lack necessary background knowledge. Anything that can be done for learners to provide some familiarity with the topics they have to read should improve comprehension.
3. Promote active confrontation between the reader and the text in order to help the reader develop appropriate metacognitive strategies when reading. Peer tutoring, a situation in which students are reading and discussing text together as they read, has been found helpful in enhancing metacognitive strategies. The reader becomes more aware of what he or she is doing during the reading process.
4. Be flexible in trying a number of approaches when working with students who have reading problems.

Providing Services On and Off Campus for Learning Disabled Students

Presenters: Karen Pearl, M.S.
The Learning Project
LaGuardia Community College, City University of New York*

Margaret Gioglio, M.S.
State University of New York, Farmingdale Community College
and the Human Resources Center, Albertson, NY

Anthony Colarossi, Ph.D.
Special Services Program
Kingsborough Community College

Date of Presentation: December 4, 1987

Panelist: Karen Pearl

Karen Pearl described the Learning Project at LaGuardia Community College. The project is cast in a preventive framework: it has been developed to reduce the risk of academic failure, thus enhancing the probability that learning disabled students will receive associate degrees from the community college. The project entails a three step process: referral, diagnosis, and support implementation.

The first step is the referral of students for services. The heterogeneity of the learning disabled population makes it very difficult to develop a unifying set of identifying criteria. One learning disabled student may be very different from another. Students are typically referred because they lack sufficient proficiency in basic reading, writing, and/or math skills. They are likely to be at risk for academic failure because of the severity of these deficiencies.

Students who are experiencing academic difficulty are given information about the nature of their learning difficulties, available support services, and procedures for requesting instructional modifications. The latter may include classroom modifications, testing modifications, and out-of-the-classroom training in the use of learning strategies. The identification of appropriate learning strategies for an individual student is largely determined through the diagnostic process. Strategies are then taught to the students during tutoring sessions.

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*Now at the Literacy Assistance Center, New York City.

Students may be referred in various ways. Most frequently they are referred by faculty members who observe that these students are making unusual types of errors that other students rarely make. Some are also identified and referred by personnel from high schools that they have attended. Additionally, students may be referred by agencies such as the Office of Vocational Rehabilitation. In addition, they may be and frequently are self-referred.

Once a student is referred, an initial intake interview is conducted. During intake, a counselor attempts to establish rapport with the student. The student is informed of the need for a psychoeducational assessment of his or her abilities and disabilities in order to develop a comprehensive learning profile. This profile will be used as a guide in developing appropriate instructional modifications and strategies to enhance the student's learning.

In order to benefit fully from the services of the Learning Project, the student is strongly encouraged to be an active participant at each step in the process. The student is expected, through counseling and/or other supports, to develop a certain degree of openness. This openness will maximize the student's ability to accept his both capacities and limitations. Through self-acceptance, the student will be able to take appropriate actions to promote his or her development.

The diagnostic process is accomplished by a comprehensive psychoeducational battery of tests. Testing usually lasts about three hours. Included in the battery are: a writing sample by the student, the Bender Visual-Motor Gestalt Test, the Wechsler Adult Intelligence Scale-Revised, the Wide Range Achievement Test-Revised, the Binet Sentence Memory Test, the Wepman Auditory Discrimination Test, The Incomplete Sentence Blank, and the Rorschach (if indicated).

The intelligence test is included in the battery since the most commonly accepted definition of a learning disability states that the student has at least average intelligence. Although intelligence tests yield global IQ scores, the Wechsler Adult Intelligence Scale-Revised is particulary useful because it yields scores on 11 subtests. A scatter profile of intellectual functioning can be obtained from the Wechsler which depicts the student's strengths and weaknesses on different dimensions of intellectual functioning such as comprehension, fund of knowledge, short and long-term-memory, attention span, and motivation. Other tests in the battery assess sensory functioning, emotional functioning, and academic achievement.

A learning profile derived from results of the tests is shared with the student. Educational objectives are then planned to maximize the student's success on campus.

Staff at the Learning Project are providing both instructional and counseling services to the student. Additionally, the staff negotiates recommended accommodations with faculty members on the behalf of the student.

Panelist: Margaret Gioglio

Margaret Gioglio, a learning disabilities specialist at SUNY Farmingdale and the Human Resources Center, described support services for learning disabled students at SUNY Farmingdale. Support services are provided by: (1) the Office of Disabled Student Services, (2) the Learning Center and (3) the Psychological Services Center. The Office of Disabled Student Services primarily provides academic counseling and arranges any needed classroom and/or test accommodations. The Learning Center provides tutoring services. There is a math lab, a reading lab, and a writing lab. A reading specialist and a learning disability specialist are both available to provide supervision to tutors as well as to tutor themselves when a specific learning need arises. The Psychological Services Center assists in the identification of learning disabled students who have not been identified during application to the college. The Center also provides services of a psychological nature to learning disabled students as well as other students.

Gioglio stressed the importance of early identification of learning disabled students in maximizing their learning opportunity. It is sometimes difficult to identify these students because a certain percentage do not know that they have a learning problem. Others who do know and who may have been previously labeled as learning disabled and/or special education high school students have been concerned that they would not be admitted to the college.

Gioglio described a project, "Transition from High School to College," that the Human Resources Center, in Albertson, N.Y., had coordinated between several feeder high schools and SUNY Farmingdale, Nassau, and Queensborough Community Colleges. The aim of the project was to identify potential learning disabled community college students during their junior and senior years in high school and to provide support to ease the transition to the community colleges. These students typically indicate that they have a learning disability on the admissions application to the colleges. They are then linked up with the available support services on the campuses.

Other students are identified and provided with support services when they fail the reading, writing, or math placement tests. These students may be offered a pre-college program in liberal arts or technical studies before they enter an academic area.

Additionally, samples of students' written work obtained during the admission procedure that indicate learning problems are sent to the reading and learning disabilities specialists for further diagnosis. If it is determined that these students are likely to experience learning problems, they are also referred to support services. Further, students who enter academic programs, and then experience learning problems, may also receive support services. Typically they are self-referred or faculty-referred.

In addition to these groups of students, special attention is given to older students who are returning to school after a noteable time-lag. These students may or may not have been previously identified as learning disabled. The lack of identification may have occurred because they had gone through a public school system before it had become sensitized to learning disabilities.

All students who become identified as in need of support services are sent a letter describing the available services that exist on campus. They are then encouraged to take advantage of these services.

The Learning Center is centrally located in the library of the college. Students with all kinds of academic problems in addition to specific learning disabilities come to the center for tutorial services. This centralization of services helps to abate the stigma that many learning disabled students fear.

The Office of Disabled Student Services is also centrally located, in the Career Development Center. This proximity to campus career development activities enables learning disabled students to get an early start in the transition from college to the work world. When vocational issues arise, students can receive immediate counseling. Further, students who do gain employment can get support for any problems that occur on the job. In short, student support services at

SUNY/Farmingdale for learning disabled students include academic counseling, classroom and test accommodations, tutorial services, vocational counseling and psychological services.

Panelist: Anthony Colarossi

Anthony Colarossi described the Special Services Program at Kingsborough Community College as it pertains to learning disabled students. He discussed the focus of two different pieces of legislation that protect the educational rights of the disabled. Specifically, he noted the difference in scope and orientation of PL94-142 which pertains to public school students, and Section 504 of PL93-113, which pertains to college students. Due to the different educational policies mandated by these two laws, many high school special education students are not prepared for the degree of independence, self-awareness, and personal responsibility that are required for them to receive services and function effectively on a college level.

As a consequence of 504, the Special Services Program attempts to provide services to students in a manner that fosters the development of these skills. Therefore, the program has been very much oriented toward students' voluntary participation, active involvement, the development of self-advocacy skills and self-monitoring of academic progress and learning style. Students are most often referred by their high school special education program, next most often by faculty, self, and outside agency referrals.

In providing a service to a student, documentation of the learning problem is desired. Although the staff in the Special Services program will perform evaluations when necessary, it is preferred that students be evaluated off-campus by an outside agency. What is specifically looked for in such evaluations are not only IQ scores but the manner in which these scores were attained, that is, the students' patterns of strengths and weaknesses, scatter, discrepancies, and unique style of responding. It is preferred that cognitive skills be assessed through a variety of modalities. The discrepancies between intellectual potential and actual academic performance are also examined. However, of particular importance is the determination of functional skills which are useful in planning appropriate services for the student. This means ascertaining the student's study skills including: time management, note taking skills, textbook comprehension, and utilization of educational aids (tape recorders, word processors, etc.).

After students have been referred and an evaluation has been performed, they are scheduled for an intake appointment by one of the counselors in the program. During intake, the counselor explores the referral issue and gathers a detailed history including personal, medical, educational, and occupational information. The expressive style of the student is also assessed. This assessment includes an evaluation of how students perceive themselves, how they define their disability, and what kinds of coping strategies have been effective for them.

Upon completion of the intake, the student is then scheduled for an open-ended clinical interview with Colarossi. He reviews beforehand the available information on the student from the evaluation and the intake. In the interview he assesses how students present themselves, perceive college, structure situations and are able to articulate the nature of their disability in functional terms. During this process the student and Colarossi cooperatively develop the student's Special Services Support Plan, which delineates which services will be provided to the student (including tutoring, accommodations, and counseling) and what the student's responsibilities are. At the conclusion of the negotiation both Colarossi and the student sign the contract.

The program provides counseling aimed at helping the student acquire the self-awareness, advocacy skills, and necessary accommodations to promote academic success. Counseling focuses on building effective communication skills for presenting needs to faculty and supervisors. A course entitled "Self-Exploration and Career Decision-Making" is offered specifically to students in the program. In the course, students role-play anxiety-eliciting encounters with significant others such as professors and employers. Career issues related to a student's disability are also discussed. Additionally, both accommodations and the technical aspects of using these accommodations are presented.

The program conducts ongoing process evaluations. Follow-up is being planned to explore what happens to those students who go to work at the conclusion of their studies and what happens to those who go on to four-year colleges.

Discussion: Issues and Comments

Participants' questions and extracts from panelists' replies are provided below.

(1) Describe the type of tutors employed in your programs.

Gioglio: At SUNY Farmingdale, both professional and peer tutors provide services. The tutors are supervised by the reading specialist and the learning disabilities specialist.

Pearl: At LaGuardia, peer tutors work with the students under the supervision of a professional master tutor. In addition to formal supervision, the peer tutors are encouraged to meet with the other counselor or myself informally when they encounter a problem in tutoring.

Colarossi: At Kingsborough, a variety of tutorial services are offered such as the English Skills Lab, Math Skills Lab, in addition to regular tutorial services. Special Services provides individual tutoring by tutors who are trained to work with learning disabled students and are supervised on a weekly basis. Students are encouraged to take advantage of all available services.

(2) Address the issue of career opportunities for seriously learning disabled students.

Gioglio: Many learning disabled students, once they leave college, are finding that they are either unemployed or employed in dead-end positions with no opportunity for advancement. As a result of the employment difficulties of the learning disabled students, we initiated a "transition to work from community college project." We try to find out what our students can do best. Then we counsel them on how to get jobs. We also help them keep the jobs. What often happens with learning disabled people is that they quit the moment a problem arises. Consequently, they display a work pattern of jumping from job to job. We try to provide them with the proper support services which will help them resolve problems and find solutions before quitting.

Pearl: LaGuardia Community College is a career education college. All of our students take cooperative education work internships. They work and then they graduate. They do not graduate and then work. This process enables us to help students with work-related problems as they arise.

Colarossi: We teach our students the necessary skills for negotiating with employers in a similar manner as they would negotiate with professors about their disability. That is to say very specifically, "This is my disability. This is what it means functionally. This is a possible solution to the functional problem."

(3) Justify funding for learning disabled students services.

Pearl: The Chronicle of Higher Education recently estimated that at least 14 percent of all students on two and four-year campuses across the country have learning disabilities. Many of these students have not been formally identified. They have not been identified because identification is a lengthy and costly process and because support services do not exist to accommodate all of these students. Small programs are funded because they are better than no programs. It is hoped that we can become more creative in terms of how we use resources so that the whole process of identification and support will not be as costly in the future as it is now.

Colarossi: There are many more learning disabled people in prisons and who are juvenile delinquents than there are on the college campuses. It is difficult to find many offenders who are good readers. The students that we see are success stories. They have learned to negotiate the system well to come this far. Many of the learning disabled population experience frustrations early. These students are likely to drop out in junior high school. Those are the ones who are likely to sell drugs and rip off the chains on the subways.

Learning Disability or Learning Difficulty: How Do We Tell the Difference?

Presenter: Barbara Cordoni, Ed.D.
Department of Special Education, The Achieve Program
Southern Illinois University, Carbondale

Date of Presentation: March 18, 1988

Barbara Cordoni presented case material concerning learning disabled students with whom she had worked in the Achieve Program at Southern Illinois University. The material illustrated typical problems in communication that occur between learning disabled students and faculty members in post-secondary educational settings. She also displayed several samples of the Achieve students' writing to demonstrate specific problems that learning disabled community college students are likely to present.

The Achieve Program has served over 700 learning disabled students since its inception, and 130 learning disabled students are currently enrolled in this program. These students have average measured intelligence and are required to enroll in regular academic programs from the first day that they matriculate. They receive support services that most learning disabled programs offer such as a variety of classroom accommodations, academic planning, tutoring, remediation, test proctoring, and counseling. However, these students must be able to keep up and compete with their non-handicapped peers with the support services provided.

Cordoni addressed two major issues of concern to community colleges which are providing educational opportunities to learning disabled students. The first issue related to problems in identification of learning disabled students as distinguished from the educationally disadvantaged students and minimally English-proficient students. The second issue concerned the provision of appropriate interventions for learning disabled students in the community college once they had been identified.

Cordoni stated that of all higher education institutions, the community colleges will get the largest proportion of handicapped students, including students with learning disabilities. Several factors contribute to the comparatively large incidence of handicapped students in the community colleges. Admission policies are less strict at the two-year colleges. Class size is generally smaller. Faculty members are more readily accessible. Additionally, the informal environment of the community college campus probably appears less threatening to those who are handicapped.

The community colleges may be in a more advantageous position to accommodate learning disabled students than large universities. Because classes are smaller, community college professors may be more likely to identify students who have learning disabilities, and to refer them for services. It is easier to establish college-wide liaisons with faculty members and to develop and implement support services within community colleges.

Despite these advantages, a major problem that the community colleges are faced with today is the identification of learning disabled students. Although younger learning disabled students have frequently been identified by the school system prior to graduation from high school, learning disabled students 25 years of age and older are not likely to have been previously diagnosed. Services in the public schools did not yet exist for the identification of learning disabilities. Furthermore, some students who have previously been identified as learning disabled may not reveal this to appropriate community college personnel.

The available diagnostic services that exist at community colleges are varied. Some colleges have excellent resources while others have few testing services.

Cordoni discussed problems in arriving at accurate diagnoses. For example a student in the Achieve Program had a math learning disability. The diagnostic task was to determine the functional level of the student in mathematics. On the Key Math Test, a test with four written subtests and ten oral subtests, he scored at the seventh grade six month level. On the Peabody Individual Achievement Test, an oral test, he scored at the twelfth grade nine month level. On the Woodcock-Johnson Psychoeducational Test Battery, which has both written and oral responses, he received a score at the ninth grade seven month level. On a Wide Range Achievement Test, a written test that is timed, he scored at the fifth grade six month level. Finally, on the Arithmetic subtest of the Wechsler Adult Intelligence Scale, which is oral and timed, he obtained a scaled score of eight, the average score being 10.

Cordoni stated that based on these disparate test results there is no way to determine the functional level of the student in mathematics. To make such a determination, a task analysis must be conducted to identify kinds of errors. This

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example illustrates the danger of using only one test to determine the level of functioning for learning disabled students.

An analysis of this student's performance on these tests indicated that when the student was put in a timed situation and when he had to write his responses, he scored more poorly because of the time limitations and the writing requirements, not because of the content or the computations. She stated that quite often test results do not give real indications of what learning disabled students are capable of doing.

Cordoni provided some clues to the identification of learning disabled students. These students do not show the same pattern of "nonlearning" that other students show. They typically display peaks and valleys in performance. They tend to be good in some areas such as science or math. However, they may have failed all their English courses or avoided these courses to keep from failing. Roughly 80 percent of learning disabled students have reading problems. Spelling is usually the weakest area for learning disabled students. Another indication of a learning disability is an oral language-written language discrepancy where a student is orally articulate but fails written essays. Another discrepancy occurs when a student performs well on multiple-choice exams but fails essay exams. A further discrepancy arises in the student with perceptual problems who passes multiple-choice exams when he circles the answer using the test booklet but fails when he has to mark his responses on an answer sheet.

In contrast to the peaks and valleys in performance of learning disabled students, non-native English speaking students will have difficulty only in specific areas where language is used, for example with word problems in mathematics, and reading and writing assignments. Educationally disadvantaged students, on the other hand, perform poorly across all content areas. These three groups have three very different kinds of nonlearning patterns.

For the purpose of evaluation, Cordoni recommended the use of two tests: the Wechsler Adult Intelligence Scale-Revised (WAIS-R) and the Malcomesius Specific Language Disability Test (Educators Publishing Company, Cambridge, MA). Pattern analysis of subtest performance on the WAIS-R has yielded a typical profile for the learning disabled. Learning disabled individuals are generally weak in the tasks requiring short term memory, symbol manipulation, and visual-motor functioning.

They may also score lower on the information subtest because they were pulled out of the content classes (e.g., science and social studies) in high school so they could attend remedial classes.

While a licensed psychologist needs to be involved in administering the WAIS-R, any professional educator is capable of administering the Malcomesius test. Further, where the WAIS-R is administered individually, the Malcomesius can be given to groups. The test yields a functional analysis of students' ability to perform in a classroom on several tasks. It includes a blackboard copying task, a workbook task, a visual-motor test, a visual memory to motor task, an auditory discrimination task, an auditory memory-to-motor task, a comprehension task, and a spelling task. The comprehension task indicates how well the student can follow a lecture and how well he or she can take notes.

The test can differentiate between learning disabilities, minimal English language proficiency and educational disadvantage. Only for the learning disabled student does the test pose major difficulties. An example is the blackboard copying task. The handwriting of the learning disabled students is typically poor. Letters may be reversed or even transposed in a word. These students will take longer to complete the task than the other groups. They have to look back at the board more frequently in order to hold the information in short-term memory.

Cordoni then went on to discuss the importance, in designing appropriate instructional interventions, of understanding the personality characteristics of learning disabled students. Over the course of their lives they have been extremely hurt, have generally experienced many failures, and often have very poor self images. They tend to marry late and to have poor social skills. They generally remain in the homes of their parents much longer than their non-handicapped peers because they are deficient not only educationally but also in job skills. Oftentimes, they manifest language deficits which cause them to be social isolates because they do not know what to say to people. They tend to lack inner knowledge of time and space that cause them to have problems in knowing where they are in connection with others as well as knowing how long it takes to get somewhere. They have trouble in understanding things in perspective. They tend to have major problems attaining independence. Additionally they often have difficulty advocating for themselves and in talking about their disabilities.

Two defensive styles of learning disabled students that Cordoni has commonly encountered in her work are the "manipulative" and the "aggressive" styles. Manipulative students try to talk themselves out of situations rather than confront their disability and develop necessary compensatory skills. Aggressive students feel singled out and persecuted by the world.

The counseling intervention that she recommends for all learning disabled students is reality therapy. As adults we are judged on our social behavior, not our reading scores. Learning disabled students need to learn to get along with others and to express their needs in ways that are non-threatening to others.

Cordoni advocated providing learning disabled students with very direct instruction in terms of social awareness. Where social knowledge is generally acquired by most people "naturally" through observational learning, learning disabled students frequently have perceptual deficits which appear to act in some way to preclude acquiring this kind of knowledge. They need to be very directly taught grooming and other social skills in order to alleviate the social isolation that so many experience.

These students need a great deal of structure in academic planning. They need to learn to allocate enough time for various tasks and to plan well ahead for exams and assignments.

They need to be taught how to handle success. They know how to fail because that is what they have mostly done. In order to be successful, they have to try, and there is always the risk that they might not make it. It is important for counselors to build on each success to keep learning disabled students from sabotaging themselves.

As they become more successful, they begin to show signs of increased self-confidence, and to become more optimistic. They may change their majors because they begin to feel capable of greater levels of achievement.

According to Cordoni, a first step in providing academic accommodations for learning disabled students is to educate community college faculty regarding the nature of learning disabilities. She suggested the use of a videotape provided by the Association for Children and Adults with Learning Disabilities entitled "I'm Not Stupid" which illustrates the components of learning disabilities. Cordoni reported that she herself had produced an 18 minute tape for presentation to her own faculty.

The tape illustrated typical behaviors displayed by learning disabled students in class, and presented some of the possible causes that contributed to learning disabilities.

In addition to more commonly used accommodations and support services such as extended time, readers, writers, tutoring services, and counseling, Cordoni talked about other kinds of accommodations that are being used in the Achieve Program. She reported great success with computers, for example for the teaching of algebra and calculus. Her students have also benefited from word processing programs. One software program, "Spell Check," has been particularly useful in improving the spelling, reading and vocabulary of her learning disabled students. The program places a caret over misspelled words, which indicates to students that they should look up the words in a dictionary. According to Dr. Cordoni, if students type the words correctly enough times, they will eventually learn to spell them.

Other spelling aids that she recommended were the How to Spell it Book, published by Grosset and Dunlop and the "Franklin Spelling Ace." The How to Spell it Book color codes all the ways that a word is likely to be misspelled in one color and the correct way to spell the word in another color. The Franklin Spelling Ace is a computer-like device that allows a person to present the first two or three letters of a word. It then generates a list of all words beginning with these letters, stopping when the person indicates that he or she has found the desired word. Cordoni also reported that poor readers in her program have benefited from audiotaped texts.

Procedures and Practices on Campus for Referring Learning Disabled Students for Services.

Presenters: Sydney Becker, Ph.D.
Basic Education Department
Nassau Community College, State University of New York

Joann Mischianti, M.S.
Student Support Services
New York City Technical College, City University of New York

Golda Solomon, M.A.
Speech, Theater and Communication Arts Department,
Borough of Manhattan Community College, City University of New York

Date of Presentation: March 13, 1988

Panelist: Sydney Becker

Sydney Becker described various ways that learning disabled students at Nassau Community College can be referred for services. Those who have been identified as learning disabled prior to admission to the college can indicate it on the application form to the school. These students are then contacted by mail by the Office of Disabled Student Services. They are notified of the available support services at the college and are encouraged to take advantage of these services.

Several departments offer labs where learning disabled and other students may receive individual assistance. The English Department has a writing lab. There is also a math lab and a computer-assisted lab. The Office of Disabled Student Services provides counseling and tutoring services. Additionally, they have learning disabilities specialists on staff who work with students.

This biggest problem with the group of students who have been previously identified is that they must come forward and identify themselves as learning disabled. Many of these students are reluctant to admit that they have a learning disability.

Students are also referred for services on the basis of freshman placement tests in reading, writing, and mathematics. All students who are accepted into the college must take these tests. On the basis of their performance, some students are required to take a basic education remedial program which Dr. Becker helped to develop and implement. There are currently 225 students enrolled in this program, 50 of whom have been identified as learning disabled.

Additionally, students may be referred for evaluation by professors who have noticed something unusual about their performance and by the Office of Disabled Student Services. Nassau does not perform evaluations of students because of lack of resources. However, there are several colleges in the area that will perform the evaluations.

Although identification of learning disabilities is a problem, a greater problem is the recommendation of appropriate alternatives for students who are not going to succeed in college. Nassau has been fortunate to have a grant-funded job placement counselor; who helps these students find vocational training and job opportunities.

Becker described the Basic Education Program with which she is integrally involved. The program provides remediation in English, mathematics, and reading. Students must receive scores below a set percentile in all three freshman placement tests to receive services. The program emphasizes learning strategies and metacognition; Becker believes that it is ideally suited for learning disabled students for this reason. The strategies that are used are highly structured—mnemonic devices, planning, and organizing strategies. In reading, there are several prereading activities such as mapmaking and organizing before reading. Problem solving approaches are used in math.

In addition to these strategy training activities, the students in the Basic Education Program are required to attend weekly counseling sessions as well as computer-assisted labs for reading, writing, and math. Counseling generally revolves around issues of independence for learning disabled students. A major function of counseling is to help these students understand their learning disabilities. They have to learn to be able to reveal and explain them to their professors. They also are helped to learn to deal with their very negative feelings towards themselves.

Becker stated that the academic senate at Nassau has established policies for appropriate accommodations and the number of times that courses can be repeated. These policy statements have helped to ensure that learning disabled students get the accommodations they need. It also helps to prevent unnecessary frustration on the part of those students who will never be able to successfully complete college work.

Panelist: Joann Mischianti

The majority of learning disabled students participating in Student Support Services at New York City Technical College have been previously diagnosed as learning disabled. Based on the documentation from the high schools or other testing services, the Student Support Services Program develops services that are appropriate for the students' needs and deficits.

Obtaining evaluations for students who are referred by faculty members, because it is suspected that the student may be learning disabled, can be difficult. Most of these students do not have the financial resources or insurance plans which would cover the cost of evaluations. However, in structured interviews with these students, it is frequently ascertained that they were in special education classes in high school. In these cases, it usually turns out that an evaluation has already been conducted.

For students for whom there has not been prior evaluation, the next step in the referral process is a screening which includes some standardized tests and some informal measures. The purpose of the screening is to elicit information to suggest to referral sources and also to the student why an evaluation is indicated. Students are often referred to the Office of Vocational Rehabilitation (OVR) for evaluation. An advantage in working with OVR is that it also sponsors vocational training. This is particularly valuable for those students who are not going to succeed at the community college.

Before students are sent to OVR, it is necessary to explain to them what that agency is all about. It is also very important to inform the students that it is their responsibility to have the results of the evaluation sent to the Student Support Services Program at New York City Tech.

Once the information from the evaluations is obtained, academic interventions are planned and implemented. New York City Technical College offers testing accommodations (e.g., extended time), study skills planning, academic planning, tutoring, counseling, and liaison with faculty members.

In addition to these basic services, the college offers some innovative services. The Freshman Orientation Program is a three day orientation program planned specifically to introduce learning disabled students to the college. During orientation, learning disabled freshmen meet upper classmen who are learning disabled. They also tour the campus. Registration procedures are discussed. Students have an opportunity to discuss how college is different from high school, explore compensatory strategies and practice study skills. They are also introduced to a "hands on" computer exercise that teaches word processing.

In addition to the orientation project, there is an interdepartmental writing project. Students are assigned to a small class. A teaching assistant works closely with the faculty member and provides individual tutoring to students outside of class. There is a student support group in which learning disabled students help one another. The support group tends to function differently each year depending on each group's unique composition of students.

A resource center of specialized equipment staffed with peer assistants is available not only for learning disabled students but all disabled students. The learning disabled students take advantage particularly of the word processing and notetaking services offered by the resource center.

Finally, a small group of students with learning disabilities is presently participating in NYU's career development training program. New York City Technical College is just one of sites selected by NYU for activities conducted with a three-year grant including vocational counseling, internships, job placement, and follow-up.

Panelist: Golda Solomon

Golda Solomon described the development of the Ad Hoc Committee for the Atypical Learner which she co-chairs, and of the Internal Clearinghouse for Information and Services on Learning Disabilities at the Borough of Manhattan Community College. She presented her personal account of adopting a low birth weight, premature son who was later diagnosed as learning disabled. She told conference participants how this experience led to her determination to help improve the educational opportunities of learning disabled students at her college.

In the fall of 1986, Solomon, a speech instructor, had a student in one of her classes who displayed marked variability in his daily performance. Upon investigation, she discovered that this student was receiving individual assistance by at least two other professors and a staff psychologist. On Solomon's suggestion these faculty members began to coordinate their efforts in working with this student.

The administration of the Borough of Manhattan Community College was very receptive to the project. More and more faculty became interested in addressing learing disabilities issues and in the Fall of 1987, the Ad Hoc Committee on the Atypical Learner was formally recognized.

The basic functions of the committee are to make recommendations to the Dean of Faculty concerning atypical learners and to initiate a variety of faculty activities. The goals of the committee include:

1. To review how services for learning disabled students are being addressed at other CUNY units.
2. To develop an internal clearinghouse for services and information on learning disabilities.
3. To work with the Faculty Development Committee to create faculty development opportunities related to learning disabilities.
4. To develop proposals for outside funding to strengthen the Borough of Manhattan Community College's ability to service the atypical learner.

The Committee developed a Vocational Education Act grant proposal requesting a part time learning disabilities specialist, a tutoring supervisor, peer-tutors, aids, work-study students, materials, and equipment.

Two interdepartmental faculty development grants have also been awarded to faculty at the college. One grant was awarded for the assessment and provision of tutorial services for atypical learners. The other grant was awarded to bring a learning disabilities specialist to the campus to address interested faculty members on the topic of atypical learners. Although these grants were not monetarily large, they gave the committee visibility at the college.

Solomon believes that there is a large unidentified learning disabled population at the Borough of Manhattan Community College. Although no collegewide identification process yet exists, the efforts of the Committee have raised the awareness of faculty members.

At the conclusion of the panel presentations, a lively discussion between conference participants and panelists addressed issues of concern in providing services to learning disabled students at the community college. The major topics discussed included the location of low cost diagnostic services and the procurement of funding of support services.

Writing Skills Instruction and the Learning Disabled Community College Student: Research and Practice

Presenter: Susan Vogel, Ph.D.
Educational Psychology, Counseling, and Special Education Department
Northern Illinois University

Date of Presentation: December 8, 1989

The importance of writing, as a catalyst of thinking, is second to none. Writing is important not only for academic tasks but for many everyday situations. In postsecondary education, it is necessary to integrate a substantial amount of information received aurally, for example in lectures, with information read. Such integration is only possible when the material is integrated in written form. There is a great need to continue to instruct postsecondary students with learning disabilities in the written language area.

Written language is the highest in the hierarchy of language development, the most difficult stage to accomplish. As a result, writing problems reflect all the problems that learning disabled individuals have experienced in earlier stages of language development. Oral expressive and receptive language problems both affect writing skills. Various types of writing functions are affected by different types of learning problems. Written language problems are among the most revealing characteristics of learning disabilities. In adults, language problems are more evident in writing than in speech. Faculty can use an unaided writing sample as a screening device.

It used to be thought that learning disabilities affect only children and that they eventually disappear. However, learning disabilities do not go away. In adults, they will be more or less evident, depending on the demands of the setting. There is no singular form of learning disability that is the same across all individuals. This makes it very difficult diagnostically, and very difficult for faculty. Learning disabilities are heterogeneous and even one of the major sub-groups, individuals who have dyslexia, consists of sub-types.

The causation of learning disabilities is in most cases intrinsic and is present at birth. In many learning disabled individuals the brain develops differently; the brain is not necessarily damaged, but different. We are now discovering specific neuro-anatomical differences that affect the way individuals take in information through the auditory and visual channels. They affect the way information is integrated to meaning and retained, and cause the memory deficit that we see so often in learning disabled individuals.

Deficits in written expressive language exist on a continuum in learning disabled individuals, just as learning disabilities are on a continuum from minimal to severe. Severity is becoming a very important issue in provision of services in some states. Recently, learning disabled adults have begun to be considered eligible for vocational rehabilitation services solely on the basis of a severe learning disability, even when it is not concomitant with other disabilities. Ninety-nine percent of learning disabled individuals have written expressive language difficulties. Unfortunately, the reasons for the severity, the persistence, and the prevalence of written expressive language disorders are not fully understood.

Following are some broad guidelines to apply in trying to understand the different types of written language problems of learning disabled adults. In the pre-writing stage, learning disabled adults encounter the problem of finding a topic. Once having found the topic, however, they have difficulty developing the topic, in enriching and providing details. They also have trouble in researching the topic. Library skills may be poor and they may be unfamiliar with the use of a computerized index or other reference library resources. These are hurdles that present special challenges for them. Once having coped with them, however, they have trouble integrating the masses of written notes that they have taken on the reading that they have done on the topic. They also have difficulties at the organizational level. They have trouble following a sequential, step-by-step, orderly progression in using their written notes. Further, their organizational problems are often seen in difficulty using transition words, which affect cohesion. Very little research has been done on this subject and it is sorely needed.

They also have problems with the initiation of the writing act. At this point, learning disabled adults have difficulty developing ideas. This problem relates to difficulties in the integration and organization of material. The introductory paragraph is often the hardest, especially the thesis statement, which is a crystallization of the whole paper. They also have to come up with a conclusion, requiring a type of inferential thinking that is hard for some learning disabled adults. Productivity, the ability to write the appropriate length, is a further problem. It is well known that learning disabled adults write shorter papers.

Another problem, at a more sophisticated level, concerns judging one's audience. Learning disabled adults may not discern the difference between writing to a friend and to a professor. At another level, they may have poor penmanship due to problems with the motor act of writing, and the coordination of the eyes and the hand. Not all the problems described above apply to all learning disabled adults. For example, there are gender differences among learning disabled adults, typically, learning disabled females have better handwriting than the male population, while almost all of them, irrespective of gender, have spelling difficulties.

Learning disabled adults have difficulties in coming up with the right word. For example, words which do not have a concrete referent, such as prepositions, cause them problems. They may use the wrong preposition or the definite article instead of indefinite article. They have problems at the morphological level, for example omitting word endings, such as the "ing," "s" or the "ed." Spelling errors are also made, often because of incomplete mastery of phonics. Two of the most sensitive discriminators in differentiating the learning disabled from underachievers and slow learners, are the tasks of reading single real and nonsense words. Another good discriminator is a phonological segmentation task, involving auditory conceptualization.

There are also problems at the sentence level, which reveal problems with the structure of the language, or syntax. Sentences may be incomplete, run-ons or "tangled" syntax. Alternately, the LD writer may play it safe and write monotonous, simple sentences.

In the rewriting or revision stage, the third stage in the writing process, learning disabled individuals have problems with error detection, or metalinguistic awareness. When they read their papers aloud to locate potential structural errors, often times they are not able to recognize when mistakes have been made, especially with preposition usage. Further, if they do recognize the error or it is pointed out to them, they do not know how to correct it. These metalinguistic impairments reflect their weak oral language foundation on which every other level of language is built. In the revision stage, they have problems monitoring their spelling and mechanical errors, visually monitoring them, and then correcting them. Lastly, there are problems in the polishing and burnishing stage, the final stage in the rewriting process. Learning disabled adults often need to produce many more drafts until they have identified and corrected all their errors. This process requires a high level of determination and stamina as well as a facilitative instructor and nurturing environment.

The following guidelines are offered to help writing teachers working with learning disabled students in their writing classes:

1. No writing instructional program can be effective without attending to the cultivation of a facilitative writing climate. In such an environment the writer can trust that there will be no penalty to the writer for revealing one's weaknesses.
2. There is no one right approach; however, the creative and sensitive teacher can use the curriculum for non-learning disabled students with some modifications. For example, more time needs to be allowed at each stage of the writing process, in the pre-writing stage to identify a topic, to generate a thesis statement, and to research the issues. More time is also needed for students to complete assignments. More time is needed at the revision stage for conferencing, which, although time consuming, provides multiple opportunities for revising and rewriting.
3 Ample time for oral language interaction should be allowed at each stage. At the pre-writing stage, this is crucial; tape recording brainstorming sessions is very helpful here.
4. At the rewriting stage, it is important to help with the identification and correction of grammatical errors on a one-to-one basis through discussion. Identifying objectives and working on them sequentially in an individualized manner is more beneficial to the learning disabled student than formal grammar instruction. Of course, teaching grammar is necessary also because it provides a common terminology, a way of communicating, but formal instruction alone will not be effective in improving writing of learning disabled adults.
5. Learning disabled students learn best by modeling, followed by discussing the model, comparing different examples, and then by writing activities.

6. It is helpful to focus on one objective at a time, rather than all objectives simultaneously in any one writing task.
7. Writing assignments such as a term paper or research paper given six or more weeks in advance are difficult to tackle. Assist the learning disabled student to break down the task, establish checkpoints, and schedule conferences periodically.

Non-writing classes often entail extensive assignments and/or essay exams. The following suggestions are for instructors in disciplines other than English:

1. Learning disabled students should be allowed extended time on in-class writing.

2. Word-processors should be used where possible during class for note-taking and essay exams.

3. The use of a spell-checker, Franklin speller, a grammar-checker, and/or other tools should be encouraged.

4. Classmates should be allowed to make copies of their notes in order that learning disabled students can compare and double-check that their notes are complete.

5. An additional opportunity for improvement on the "final draft" should be allowed before the formal grade is given.

6. The grade should reflect content without penalty for grammar, mechanics, and spelling errors.

Specific Instructional Strategies to Help Students with Learning Disabilities Develop Writing Skills

Presenter: Patricia Anderson, M.S.
Northeast Technical Assistance Center
for Learning Disability College Programming
University of Connecticut

Date of Presentation: December 8, 1989

There is no set recipe for teaching writing to students with learning disabilities. Some instructional strategies fit some students and not others. However, most college students with learning disabilities often think about writing as delivering a product for a grade. They have a very narrow focus, and we need to help them see that writing is really a much larger process. Writing incorporates thinking and it is an expression of oneself. Stages in the writing process are as follows:

Pre-writing
- Topic selection
- Brainstorming
- Organization

Writing
- First draft

Post-writing
- Editing and rewriting
- Proofreading

In the area of topic selection, you may need to impose some type of experiential situation to help students generate a topic that they are willing to write about. There is a debate about teaching writing through reading. Students with learning disabilities have difficulties integrating the model of what they are reading into something that they have to write. Reading and writing are two completely different processes for them, which causes difficulty with integration.

Once students have chosen a topic, which includes narrowing down or broadening depending on the nature of the topic, then very often they become stuck. Brainstorming is the next stage in writing. Students with learning disabilities need to have a "bag of tricks" that they can call on for different situations, because the same technique is not going to work for each situation. One of the most popular brainstorming techniques is free writing. But very often students with learning disabilities produce so much information from that process that they do not know what to do with it. Therefore, a verbal discussion or perhaps talking into a tape recorder and then playing it back might be more effective. Students with learning disabilities need different ways of developing ideas, and very often they get stuck because they want these ideas to come out in the right logical sequence. Once they have the topic and the ideas, then they have to logically process these ideas so they can write. Some form of organization is therefore needed.

Producing the first draft involves integration and organization. Many skills are involved at this stage including paragraph structure. Post-writing constitutes two distinct categories, editing and rewriting, and proofreading. Students with learning disabilities need to be taught that a paper is proofread for several reasons several different times. Often these students need to be taught specifically to read for mechanical errors, put the paper aside, and later read it for the flow and organization of ideas.

All skills involved in writing need to be taught concurrently. We cannot teach writing skills one at a time because there are too many of them and we need all of them at once. It is important to account for the student's progress in the whole process, as opposed to the learning of each individual element, to see if they are learning and are able to apply the skills that have been taught.

A number of issues affect the writing of college students with learning disabilities, including:

- Emotional component
- Complexity of writing
- Importance/value of writing
- Matching writing to assignments
- Sense of audience
- Motivation and commitment
- Assimilation vs. direct instruction

It seems that the emotional component of writing is the most important aspect to be aware of. When working with a student with learning disabilities it should be stressed that it is perfectly natural for anyone to have difficulty with writing, which is at the very top of the language hierarchy. Students with learning disabilities have a long history of negative experiences with writing. As they write they are going to reactivate these feelings and are going to feel embarrassed or frustrated. They need to know that it is normal to feel anxious about writing and that all writers experience plateaus and setbacks. They do need to experience these feelings, and they need to know that writing involves emotions and that it is not just sentence punctuation, drills, and skills. Acknowledging that emotional hurdles exist has been successful in helping students with learning disabilities overcome their anxiety about writing.

Regarding the sense of audience, the audience in an average classroom is the teacher. Most of the time the student is writing a paper to please the teacher and to get a grade. Students need to be aware that there are different reasons for writing different kinds of assignments and that there are different kinds of audiences, requiring adjustment of the task. Students with learning disabilities, as has been stressed by a whole body of literature, cannot easily evaluate this situation and modify their skills accordingly.

Motivation and commitment cover everything that has been mentioned so far. Students should have some investment in wanting to improve their writing, preferably beyond just getting a better grade. They need to be committed to developing writing as an effective communication tool.

Regarding assimilation versus direct instruction, students need to be taught directly what the different characteristics of writing are and how they can go about attaining them. This should be discussed not only in terms of their own strengths and weaknesses, but in terms of what the actual skills are, and what skill needs to be developed.

There are a number of strategies that can be used to deal with the writing problems of students with learning disabilities. These strategies can be used in a writing or composition classroom, on a one-to-one basis, or they can be modified for use in other content areas where writing is also required.

Most importantly, students with learning disabilities should understand the assignment. The assignment should be presented in writing and also orally, so that students can hear it and also have something to refer back to if they forgot what had been said. Some teachers advocate the use of a tape-recorder. This is particularly useful in a conferencing situation where a student comes in to talk about a paper with a teacher, understands what is going on, makes some interesting contributions, and then goes home and forgets everything. What is being asked of the students should be clearly explained so they understand the particular task and what the type of assignment means to them. A visual framework for each type of exercise could be provided for the students, but the danger with this type of information is that the student might lock into that framework and might consequently be unable to vary from it.

Sometimes teachers of writing tend to forget to use student writing as a model. Student writing is easier to understand than some of the models found in books.

Teachers should be able to state exactly what they expect from their students. They should define what is meant by a strong and appropriate thesis statement, an introductory paragraph, a given number of supporting ideas, sufficient details to assure clarity, a concluding paragraph, and format or style requirements including title page, length, margins, spacing, references, and footnotes. They should tell the students how many references are expected, how many examples to provide, and so on. It is important not to leave anything to chance. Being very specific with the number of details is particularly important for students with learning disabilities. Further, these detailed instructions need to be repeated for each assignment.

Students need to be helped to organize information. Flow charts, timelines, comparison/contrast charts, circular patterns, mapping, and outlining can be used. Sometimes teachers ask students to produce an outline before they can write. An outline involves taking the ideas developed and organizing them in some logical way, so that they can then write from them. Given students' problems with outlining, some of the other methods just mentioned might be preferable; any method that presents ideas in a sequential manner can be useful.

A cut-and-paste method can be used to help with organization; a part that has been written can be cut and moved around so that the writing flows more logically. "Post-it" notes are useful in organizing main ideas because they can be shuffled around to correspond with the original writing plan.

Another strategy is to have students develop individual writing notebooks, which can be divided into three sections. In one section they can keep all of their papers, rough drafts, notes, outlines, and visual charts. In another section they can record their individual spelling errors, and in a third section they can record grammatical and mechanical errors that they have noticed in their own papers. The first section will help them to see the improvement that they have made from one paper to another, and also gives them a means of reference for the purpose of checking back. The other two sections provide a way for them to keep a personal dictionary. These notebooks are not all-inclusive and are not necessarily a teaching tool, but can be useful for students who make the same errors over and over again.

The literature speaks about explicit versus implicit learning. Teaching rules and memorization, particularly for the learning disabled population, does not work, because these students do not have the necessary underlying understanding. Choral reading can help students understand the reasons for using punctuation and therefore will help them understand specific rules. Both kinds of learning are needed: explicit learning, where students are learning to apply particular rules and techniques, and also implicit understanding, which may involve a lot of exposure to good examples of punctuation, grammar, and spelling.

Another helpful strategy to use in a classroom is to have students write together, particularly to develop a second point of view. This helps with a sense of audience and gives students an opportunity to participate in the writing/thinking process of others.

The evaluation of papers is an important process. Students' overall writing progress should be evaluated rather than just individual products. A certain number of drafts, including organizational notes and brainstorming material, should be evaluated before a grade is determined. Students should be given the option of determining when a paper is in its final format and ready to be graded. A few elements should be tackled in each paper. Each paper produced by a student with learning disabilities will not be perfect. The student should strive for personal improvement. Students with learning disabilities may need numerous revisions. Frequently, all the information is there but is may be out of order. The final paper should be compared with the original organizational method (e.g., flowchart, chart, map, etc.) for flow and consistency. "Post-it" notes and the cut-and-paste method, mentioned above, can be used for reorganization when writing the next draft. All drafts, notes, and papers should be kept sequentially in the individual writing notebook, mentioned above, in order to see progress. The use of red ink should be avoided in grading because of the emotional reaction that this color may trigger. Learning disabled students need individual consultation. Besides out-of-class appointments, individual help can be built into the class while the other students are working independently, or students can work in pairs or groups to review each other's writing.

Students with learning disabilities need to learn proofreading techniques. They should be taught the common proofreading symbols and abbreviations used in margins. They should learn to read backwards to check for spelling or sentence structure. One can start at the bottom right-hand corner of the page and read the words in reverse order or one can also read each sentence from bottom to top. The material can also be read aloud, using a finger or pencil to follow each word. The paper can be put aside and reread several times, each time focusing on a different dimension, including coherence, missing words, word choice, spelling errors, and so forth. Other people can be asked to read a draft for content and/or mechanics. Students should be asked to write on every other line or use triple spacing to facilitate editing and proofreading.

Students should review an instructor's comments in order to understand them. Rewriting should be encouraged so that students feel that the comments are being used constructively and not as criticisms.

Reference:

Perreiro, D. (1984). Enhancing written expression of the learning disabled. The Office of Special Services, Marist College, Poughkeepsie, N.Y.

Do Learning Disabled Individuals with Writing Problems Differ From Other Poor Writers?

Presenter: Anna Gajar, Ph.D.
Department of Special Education
Pennsylvania State University

Date of Presentation: March 30, 1990

Anna Gajar reviewed characteristics and behavior common in learning disabled students at the postsecondary level and, specifically, discussed writing difficulties they faced. She summarized her group and case study research into the writing problems of different learning disabilities subtypes, and offered suggestions for working with learning disabled students on writing skills.

Learning disabilities are heterogeneous, and while the definition of learning disabilities provides us with a theoretical base, it is of little use in the practice of identification or diagnosis. This causes a paradox: you have a definition but not identification. Because of this paradox, practitioners in the field are starting to identify learning disabilities subtypes.

In her work with learning disabled postsecondary students, Gajar has observed three subtypes: language disabled, perceptually disabled, and motorically disabled.

Students with learning disabilities in the language area have good auditory acuity but exhibit problems with central and auditory memory, with syntax, narrative language production, and word finding. These problems translate to misunderstanding of what is being said, and trouble understanding the meaning of words. Learning disabled students in this subtype interpret language literally, in contrast to poor writers, who do not manifest this problem. In this subtype, thoughts and ideas are incompletely expressed both in spoken and written language. Students in this group produce bizarre essays.

Another set of characteristics is associated with students who have visual perceptual learning disabilities. Approximately 15% of the learning disabled students at Penn State fall into this group. These students exhibit poor visual memory. They are distractable and, because they have problems structuring and organizing time, they are often late. They are inconsistent spellers, in contrast to poor writers, who make mistakes that are usually consistent. Gajar stated that for learning disabled students, spelling problems are very difficult or impossible to overcome.

The third subtype comprises learning disabled students with motoric disabilities, also known as clumsiness or apraxia. Approximately 40% of learning disabled students at Penn State seem to fall into this group. They are uncoordinated and have difficulty sequencing motor acts. These students can express themselves well orally but have severe handwriting problems.

Writing problems result from weaknesses associated with each of the three subtypes, or a combination of all or some of them.

Gajar summarized two group research studies she conducted into written expressive disabilities in college students. The first study analyzed the compositions of 423 Penn State students who were enrolled in beginning level English classes. The compositions were analyzed according to 17 variables covering fluency, syntax and vocabulary. In addition, each composition was assigned a holistic grade by two independent English professors. The number of different words used in a composition was the single best predictor of independent holistic grading, followed by number of words in a paragraph.

The second study used a computer analysis to compare written language variables in compositions of learning disabled students and poor writers without learning disabilities. Differences were found on two factors, which were labeled vocabulary fluency and syntactic maturity. The learning disabled students wrote fewer words and did not utilize as many different words. However, they produced longer sentences and t-units (single independent clauses) than the poor writers without learning disabilities.

Gajar declared that for group research to be meaningful, it should be based on a number of replicated single-subject studies. Group studies should then be replicated across college settings. Since the field had not reached this stage, in the remainder of the presentation Gajar concentrated on individual case studies that illustrated characteristics of the three subtypes.

The assessment battery used at Penn State includes a writing sample. Students' writings are evaluated with respect to organization of thoughts, logical development of the essay, and strong, appropriate conclusions. Additionally, handwriting, spelling, grammar, vocabulary, and punctuation are assessed. Following the assessment, clinicians work with students individually. The clinicians are graduate students in special education, psychology, communication disorders, and curriculum and instruction. In working with students, an underlying assumption is made that a learning disability lasts one's whole life. While it is possible to teach compensatory strategies, it is impossible to remediate the basic deficits. One way to distinguish learning disabled students from poor writers is that, while the latter can become totally fluent in a skill, this is not possible for the learning disabled student.

The case of "Sam" (not real name) was presented. The clinicians who worked with him helped him considerably with proofreading, spelling, and organization of his written work. He needed to be allowed to use his own ideas in written assignments without judgements on the part of the clinician. He became easily frustrated and needed to be encouraged based on the progress he was able to make. He had difficulty finding the words he wanted to use, even when he knew what he wanted to say.

He taped lectures and was given untimed test conditions. He was able to use a word processor. He was greatly helped by using a hand-held photocopier because he had great difficulty taking notes from a textbook.

In tutoring sessions through the English department, he learned to tape and dictate his thoughts for essays. He also taped main points to study. He learned to organize his thoughts for essay tests. Others helped him with proofreading. Dr. Gajar mentioned that the question had been raised concerning whether help with proofreading was legitimate or whether it constituted cheating.

It was helpful to act as a facilitator with Sam, to help him put his words to paper. It was helpful for the clinician to ask him, "Was this what you wanted to say?" rather than writing things the way it seemed they should be written.

Gajar discussed the issue of whether a person can be an author if he/she "cannot write." Referring to several dictionary definitions of "author," she concluded that it was indeed possible.

A number of learning disabled students are gifted and in earlier years of their education were able to function at an average level; therefore, they were not referred to services until after they arrived at college. Basic skills training is important for learning disabled children in the early years of education. Later, as young adults with learning disabilities, they need strategies for taking notes in class, obtaining information from text, evaluating the teacher, test taking, time management, self-management, and writing a coherent essay.

The concept of "strategy" was defined as "the response that is taken if the alternative actions or options have been identified, presented, or tested." The success of each action is determined and one option is chosen.

Gajar outlined the "PA-A-PA paradigm" which she has developed to teach strategies for writing to students in each of the learning disabilities subtypes. The paradigm consists of the Pre-Activity, the Activity itself, and the Post-Activity, which make up the three components of writing. The paradigm is cyclical in that each activity leads to a new one; the Post-Activity leads to the beginning of a new cycle.

Students in the first subtype, language disabilities, have a great deal of trouble with the Pre-Activity. They have problems figuring out what is required by the professor. Students in the second and third subtypes have problems with the Activity itself and with the Post-Activity, for example, reviewing what they have written.

It needs to be kept in mind that the learning disabilities population is diverse. Students with poor language and motor skills are poor note-takers, and their compositions are either incoherent or unreadable. To write one needs to replay in memory what is essential, and write it down in a meaningful way. Language learning students have a "slower replay." They lose their train of thought, and have difficulty with vocabulary and expressing concepts. Motorically disabled students know what they want to say but they bceome fuzzy because motor energy interferes with the thought process.

Gajar noted the importance of the types of help that can be given to learning disabled writers by instructors, tutors, and directors of support programs. It needs to be determined what kind of help is appropriate and how much can be given. Learning disabled students differ in the way they express their thoughts. Gajar posed a question: will these students be given help in attaining authorship by means of alternative strategies, or will we keep insisting that, in spite of students' disabilities, they must follow the prescribed route even though it leads to failure?

In conclusion, Gajar stressed two points. First, specific learning disabilities cannot be remediated; rather compensatory strategies must be learned. Second, learning disabled students can learn skills to a certain level of proficiency, but the skills may never become automatic. The skill may break down in times of stress or anxiety.

A Three-Tier Approach for Helping Dysgraphic Writers.

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Date of Presentation: March 30, 1990

Eight years ago, Abraham Kupersmith realized that he was dyslexic and had a specific problem of dysgraphia, involving difficulties with spelling, organization and mechanics of written language. While the research literature has identified the major areas of difficulty in dysgraphia as handwriting, spelling, syntax and punctuation, discussion of organizational problems has been avoided.

Kupersmith conducted a survey at the Borough of Manhattan Community College and found that about 15% of the students in remedial writing classes were repeating the course for a third time or more. He speculated that some "multiple repeaters" were dysgraphic.

At the time he was diagnosed, he started working with dysgraphic students in community colleges and has been able to make explicit many of the techniques that he had unconsciously developed to allow his own survival in college. These techniques were subsequently refined and developed as a three-tier process.

Kupersmith claims that there is no need for instructors to communicate to students that they think they are dysgraphic. Students, like many people, associate learning disabilities with mental retardation. Rather than concentrate on labeling, the teacher should concentrate on a method such as his. The first element involves analyzing papers written by dysgraphic students in terms of spelling, syntax, punctuation, and organization.

The second step is to administer an educational history interview. The interview places the student in a comfortable position in relation to the teacher, since most people enjoy being interviewed. The interview can be presented by saying to the student, "I am interested in the problems you are having in writing, and talking about the problems you have had would help me work with you." This takes the interviewer outside of a judgmental role, and puts him or her in a role of helper. The key idea is that conventional remediation does not work for dysgraphic students; thus, finding ways to communicate with them is one of the most important things to do.

The third step in the procedure is to work on strategies based on the analysis of the paper and the interview. Kupersmith reviewed various techniques applicable to people with different deficits. The most general and useful technique is called "talk-write," which involves teaching students to write as they talk. The instructor can also "take dictation" simultaneously. Kupersmith suggested that the student should receive feedback, in terms of punctuation and fragmented or run-on sentences. As a result, the student begins to associate patterns of speech with written conventions. This method draws on their strengths in spoken language as they adapt them to written language.

Another strategy concerns the editing stage of the paper. Kupersmith emphasized that one of the main causes of editing problems is that students are taught to read in spans of four, five, or six words. However, in order to edit effectively, it is necessary to read a word at a time. In order to facilitate proofreading, students are asked to hold their pens in their unnatural hand, point to each word, and utter it at the same time. The advantage of this editing technique is that it picks up a dropped "d" or missed "s," and words that are left out. It also helps the student to confront sentences that have no meaning.

Students are then asked to memorize one sentence, by looking away and pronouncing it, which enables them to hear it. Kupersmith believes that students can be trained, beyond their initial abililty to hear language, to remember a sentence and repeat it verbatim. Thus, there is growth in the ability to hear language and record it when practice is provided in this way.

However, Kupersmith believes that for ten percent of students talking aloud is confusing. A possible variation is to have such students use a yellow highlighter on a draft and have them underline the words slowly, so they appear in relief as they are reading them.

Also in the editing area, Kupersmith asks students to "stack" stenences, or to learn to order them logically. Students are also presented with a paragraph that has already been stacked. One advantage of this method is that students work with a sentence as a whole, rather than in parts.

Kupersmith has developed a way of working with whole sentences. This method borrows from techniques that others have developed. He uses the idea of simple and complex sentence, but does not use terminology like subordinate clause, relative clause, or nominative absolute when working with students.

Students are taught to break up a simple sentence into (1) a "title" and (2) a "statement." The title of the sentence is the subject, and the statement is the rest, so that there is a two-part division in a simple sentence. There is an intuitive recognition that the sentence breaks between title and statement. In addition, it is important to teach that the sentence has one point, i.e., one important fact. Once students understand the concept of the simple sentence, they can learn to develop compound connectors.

In working with students, Kupersmith uses graphic representations to illustrate concepts. A simple sentence is represented by one straight line while a compound sentence is represented by multiple straight lines.

The reason that some people claim that dysgraphic students are almost impossible to work with in the area of writing is the extreme division between form and content that they experience. The more that this breach can be healed, the more the students can be helped.

The compound sentence is a good place to introduce the idea of transition. It is the tightest kind of transition imaginable. Kupersmith refers to the idea of old and new when teaching the concept of transition. The first part of the sentence introduces something that is new, and the second part must branch in someway from what was new through what has now become old to what is now new again.

Complex sentences present a problem in that they involve mostly analytical thoughts as opposed to associational thoughts. A complex sentence, like a simple sentence, states one point. Like the simple sentence, there is a title and statement. However, there is a complex extension in the title or in the statement. Using this method, students begin to see the visual representation of the sentence, and they begin to understand that words fit into packages, that sentences have a form, distinct from speech. Once the sentences are in a stack, students can answer the question, "What is the most important sentence in the stack?" There is a need to have the student intuitively recognize that most sentences are of almost equal weight. Once the students recognize this from the stack, they can answer the question, "Is there one thing about this that you were really trying to say?" and that usually produces the topic sentence.

Some techniques work better than others, but the more experimentation that goes on, and the more reaching that each individual teacher does in terms of his or her own imagination to find the channel that works, the more these dysgraphic students can be helped and the better the teaching is.

The secret to working with students who have learning disabilities is recognizing that they organize language in terms of questions and answers. Organizational problems stem from a wish to organize the material associationally, rather than analytically, which explains why dysgraphic students often write stories relatively well. Examination of the associational pattern reveals what dysgraphic students are trying to do, and explains problems such as run-on sentences, often accompained by poorly organized paragraphs, and lack of paragraph transition.

Dysgraphic students ask themselves questions as they write. In order to make a seemingly unintelligible essay coherent, he recommended that the instructor read through the essay and figure out when the student asked himself a silent question and what he then answered. He suggested that a transition is going on in terms of the students' internalized questions, which often provides a shift in the answer that seems to have little to do with the rest of the essay.

Kupersmith described another strategy, also based on questions and answers, to teach organization of the paragraph. Students are first asked to pick a sentence from the stack that they identify as having the highest level of generalization. The second step consists in turning the statement into a question, to determine if the rest of the paragraph answers that specific question. With the question on one hand and the answer on the other, students begin to see an associational pattern. But beyond that, they begin to understand what they could not understand through traditional methods of teaching rethoric. Therefore, the answer and question strategy provides the students with a useful technique for organizing writing. According to Kupersmith, the goal of teaching dysgraphic students is to move them from the narrative associational horizontal expansion to the vertical analytical expansion.

The Writing of Community College Students: Comparison of Students with and without Self-Reported Learning Difficulties

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Date of Presentation: March 30, 1990

While adults with learning disabilities have often overcome major reading problems, expressive writing and spelling skills often remain seriously deficient. In many cases, oral language is excellent but when writing, a student with learning disabilities may greatly underrepresent his or her true ability and knowledge. Sometimes an instructor can hardly believe that the articulate student who makes sophisticated contributions to class discussions is the real writer of a composition that is strewn with logical inconsistencies, and spelling and grammatical errors, and looks as if it were produced by someone functioning on a low intellectual level.

The incidence of learning disabilities in CUNY and SUNY is not currently known although rough estimates may be made, as in the introduction to these proceedings. Even if the extent of the problem were known, individual students who have been formaly diagnosed may not choose to identify themselves to faculty. However, by asking whole classes to describe academic or learning problems they have encountered, a teacher may be able to identify students who are "at risk" for learning disabilities and who need special attention. Toward this end, the present study was conducted to discover whether patterns of writing skills varied among community college students as a function of their reported learning difficulties.

Community college faculty and support staff who had been attending CASE/IRDOE's staff development conferences on learning disabilities were invited to participate in the study by administering a questionnaire and providing writing samples for a whole class, a small tutoring group, or individual students with whom they were working. Writing samples consisted of first drafts of essays written without assistance.

Participants were asked to include, if possible, students who were known or suspected to have learning disabilities. Each student who completed a questionnaire and contributed a writing sample provided written consent. Questionnaires were completed anonymously and the only identifying information requested on these and the writing samples were the student's initials. The questionnaire, which was developed for this study on the basis of deficits associated with learning disabilities reported in the research literature, follows this report. While the instrument could be used informally to screen for the possibility of learning difficulties, it is not intended for diagnostic purposes. Thorough testing and interviewing by a qualified professional are necessary in order to diagnose learning disabilities.

The questionnaire contains 22 questions. Of these 14 refer to indicators of learning disabilities. The target questions were items 2, 3, 4, 6, 7, 9, 12, 13, 15, 16, 17, 19, 20, and 21. A "no" answer to question 2 and "yes" answer to the other questions were considered possible indicators of learning problems. For each student, the number of answers indicating learning problems were added up to derive a total "learning difficulties" score. For the purpose of the study, students who scored 8 and above were considered to have learning difficulties. Thirty-two percent of the sample fell into this category. Of course, there is no relationship between the incidence of learning difficulties in this sample and in the CUNY and SUNY system as a whole, especially since participants were asked to include individuals known to have learning problems if they could.

A total of 129 questionnaires and writing samples were submitted. Twenty-six students indicated on their questionnaire that they did not speak English at home, and were not included in the analysis. Therefore, a total of 103 questionnaires and writing samples were analyzed.

Each student was assigned to one of four groups, depending on his or her learning difficulties score, and on whether he or she had been diagnosed as learning disabled and/or had received special education services in the past.

Group 1 (N = 20) comprised individuals who scored 8 or above on the questionnaire, and had received special education services and/or had been diagnosed as learning disabled ("yes" answers to questions 6 and/or 7). Group 2 (N = 13) had a score of 8 or above but had answered "no" to questions 6 and 7. Group 3 (N = 12) had a score below 8 but reported a diagnosis of learning disabilities and/or special education services in the past. Group 4 (N = 58) had a score below 8 and had never been diagnosed as learning disabled or received special education services.

The writing samples varied in length, for the most part because assignments and requirements varied according to the instructor and course. For most writing samples, the first 185 words were analyzed, adding on the words needed to reach the end of a sentence. When samples were shorter, the whole sample was used. The writing samples were analyzed for frequency of spelling errors, grammar errors, word usage errors, punctuation errors, and poorly written sentences.

Spelling errors were counted to determine error frequency. Grammar errors included errors of verb tense, dropped, added, or substituted endings, and word omissions. Word usage erros included similar sounding words, and confused idioms or phrases. Punctuation errors included comma omissions, insertions and substitutions, and capital omissions and insertions for initial letters of words. Sentences were scored as poorly written if they were "awkward," incomplete, or run-on. Sentences were scored only if problems could not be described in terms of grammar or word usage errors. Spelling, grammar, and word usage errors were each expressed as a proportion of total words analyzed. Sentence errors were expressed as a proportion of the total number of sentences analyzed. Punctuation errors were expressed as a frequency rather than proportion, meaning a possible confound between length of writing samples and frequency of errors; shorter samples provided fewer opportunities for punctuation errors.

Grammar, word usage, punctuation, and sentence errors were initially scored by the presenter, who then trained two further judges. Inter-rater reliability ranged from .50 to .84. The only correlations below .70 were for sentences (.50) and word usage (.52). It appeared that one rater's sentence errors were another's word usage errors.

Proportions of spelling, grammar, word usage, and sentence errors, and frequency of punctuation errors are shown in the following tables:

Type of Error: Percent ot Total Words Written

Group	Spelling		Grammar		Word Usage		Sentence	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
1	4.65	5.19	3.60	2.54	.90	.79	23.15	16.71
2	1.46	1.20	4.15	3.13	.85	.80	27.46	18.71
3	2.17	1.95	2.67	2.64	.67	.78	12.33	10.57
4	1.74	2.37	1.43	1.66	.50	.86	16.31	17.69

Group	Frequency of Punctuation Errors	
	Mean	SD
1	3.05	3.02
2	1.62	1.71
3	1.17	2.25
4	1.81	2.06

Statistical analyses showed some significant group differences. Group 1 differed from Groups 2 and 4 in the proportion of spelling error made. Group 4 differed from Groups 1 and 2 in the proportion of grammar errors. Groups 2 and 4 differed in sentence errors. No other differences were statistically significant.

In this study, Group 4 could be seen as a type of "control group" because students in this group had a low incidence of self-reported learning difficulties and had not been diagnosed as learning disabled or received special education services. This group made significantly fewer spelling, grammar and sentence errors than the other groups. While the extent of differences varied depending on the type of error being analyzed, the overall pattern of findings suggests that there is some validity to using self-reports of learning difficulties as a basis for making decisions about which students need special help with writing assignments.

Group 1 and 4 can be seen as being at two ends of a spectrum of learning needs. Group 1 reported learning problems and also a history of special education or a learning disability diagnosis, while Group 4 did not report many learning problems in the present or past. Group 1 made significantly more spelling and grammar errors than Group 4: the self-report questionnaire was able to identify a group of students who needed special help with spelling and grammar. While Groups 1 and 2 made similar numbers of sentence errors, only Group 2 differed significantly from Group 4. The pattern of differences, despite the lack of statistical significance for Group 1 corroborates the suggestion that self-reports can inform instructional decisions regarding spelling, grammar, and sentence-type errors.

There were no group differences in the area of word usage. Further research, including refinements of the scoring system for this category, seems indicated, since various studies have found that learning disabled individuals often experience word-finding and vocabulary problems.

The questionnaire might be useful for community college faculty in a wide variety of content areas whose courses include writing requirements. For example, at the beginning of a semester, the questionnaire could be administered to the whole class, providing the instructor with information regarding which students might be "at risk" for writing problems. If students are interested in receiving help, they could be referred for support services such as tutoring. If a large portion of a class self-reports learning difficulties, the instructor may need to teach writing skills in conjunction with the specific subject matter.

Of course, students may be reluctant to provide their instructor with information concerning their learning difficulties. Some students may have received special education services when younger and may no longer wish to identify themselves as having special needs now that they are in college. Instructors may consider administering the questionnaire to the whole class but not collecting the completed questionnaires. Rather, she or he may use the activity as a basis for describing support services available through the college. The questionnaire could thus be used as a means of helping students gain self-awareness of learning difficulties.

Selected References on Learning Disabilities

Aaron, P.G., & Phillips, S. (1986). A decade of research with dyslexic college students: A summary of findings. *Annals of Dyslexia*, *36*, 44-66.

Adelman, H.S., & Taylor, L. (1986). The problems of definition and differentiation and the need for a classification schema. *Journal of Learning Disabilities*, *19*, 514-520.

Alley, G., & Deshler, D. (1979). *Teaching the learning disabled adolescent: Strategies and methods*. Denver, CO: Love.

Anderson, J., Eisenberg, N., Holland, J., Wiener, H., & Rivera-Kron, C. (1983). *Integrated skills reinforcement*. New York: Longman.

Ansara, A. (1982). The Orton-Gillingham approach to remediation of developmental dyslexia. In R.N. Malatesha and P.G. Aaron (Eds.). *Reading disorders: Varieties and treatments*. New York: Academic Press.

Astin, A.W. (1981). *The American freshman: National norms for Fall, 1981*. Los Angeles: Laboratory for Research in Higher Education, Graduate School of Education, University of California, Los Angeles.

Barr, A., Donahue, W., Podrid, A., Seelig, S., Caputo, E., Holloway, S., Rubin, C., & Weinger, L. (1987). *Successful college tutoring: Focusing on the learning disabled student in the learning center*. Brooklyn, NY: Long Island University Transition Project.

Block, L. (Ed.) (1987). *Latest developments*. Columbus, OH: Association on Handicapped Student Service Programs in Postsecondary Education.

Bonnet, K.A. (1989) Learning disabilities: A neurobiological perspective in humans. *Remedial and Special Education*, *10*, 8-18.

Brill, J. (Ed.) (1987). *Learning disabled adults in postsecondary education*. Washington, DC: The National Clearinghouse on Postsecondary Education for Handicapped Individuals.

Brinckerhoff, L. (1985, July). *Accommodations for college students with learning disabilities: The law and its implementation*. Proceedings of The Association of Handicapped Student Services Programs in Post-Secondary Education Eighth Annual Conference, Atlanta, GA.

Brown, A.L., & Campione, J.C. (1986). Psychological theory and the study of learning disabilities. *American Psychologist*, *14*, 1059-1068.

Bruck, M. (1987). The adult outcomes of children with learning disabilities. *Annals of Dyslexia*, *37*, 252-262.

Buchanan, M., & Wolf, J.S. (1986). A comprehensive study of learning disabled adults. *Journal of Learning Disabilities*, *19*, 34-38.

Chall, J.S. (1983). *Stages of reading development*. New York: McGraw-Hill.

Chall, J.S. (in press) The reading of community college students: How well are they doing? How well should they be doing? To be published in *The Journal of Learning Skills*.

Clark, D.B. (1988). *Dyslexia: Theory and practice of remedial instruction*. Parkton, MD: York Press.

Collins, J.L., Edwards, R.R. (1985). Guidelines for assessing writing abilities. *Research & Teaching in Developmental Education*, *1*, 35-43.

Collins T., & Dunham, T., Engenwedin, N., & Margolis, W., (1987). *Update: The newsletter of the LD college writing project*. Minneapolis, MN: The LD College Writers Project, The University of Minnesota.

Collins, T., & Price L. (1986). Micros for LD college writers: Rewriting documentation for word-processing programs. *Learning Disabilities Focus*, *2*, 49-54.

Cordoni, B. (1988) *Living with a learning disability*. Carbondale, IL: Southern Illinois University Press.

Cordoni, B.K., O'Donnell, J.P., Ramaniah, N.V., Kurtz, J., & Rosenshein, K. (1981). Wechsler adult intelligence score patterns for learning disabled young adults. *Journal of Learning Disabilities*, *14*, 404-407.

Corn, J. (1987). Teaching remedial mathematics to learning disabled community college students. *Journal of Reading, Writing and Learning Disabilities International*, *3*, 93-102.

Corn, J. (1988). Teaching mathematics to LD college students. *Issues in College Learning Centers*, *6*.

Cuevas, G.J., & Beech, M.C. (1983). A second-language approach to mathematics skills: Applications for limited English proficient students with learning disabilities. *Learning Disability Quarterly*, *6*, 489-495.

CUNY Committee for the Disabled (1988). *Reasonable accommodations: A faculty guide to teaching college students with disabilities*. New York: Professional Staff Congress of the City University of New York.

Dalke, C., & Schmitt, S. (1987). Meeting the transition needs of college-bound students with learning disabilities. *Journal of Learning Disabilities*, *20*, 176-180.

Davie, A.R. (Ed.) (1987). HEATH resource directory. Washington DC: National Clearinghouse on Postsecondary Education for Handicapped Individuals.

Duques, S.L. (1986, Spring). An oral language bridge to writing. Teaching Exceptional Children, 214-219.

Eleventh Annual Report to Congress on the Implementation of The Education of Handicapped Act. (1989) Washington, DC: U.S. Department of Education, Office of Special Education Programs.

Ellis, E.S., Deshler, D.D., & Schumaker, J.B. (1989). Teaching adolescents with learning disabilities to generate and use task-specific strategies. Journal of Learning Disabilities. 22, 108-119.

Englert, C.S., Raphael, T.E., Anderson, L.M., Anthony, H.M., Fear, K.L., & Gregg, S.L. (1988). A case for writing intervention: Strategies for writing informational text. Learning Disabilities Focus, 3, 98-113.

Fadale, L.M. (1987). A compendium of postsecondary programs that serve special needs population. Albany: Two-Year College Development Center, SUNY Albany.

Fenty, B. (1987, February) My struggle with dyslexia. The Orton Dyslexia Society Newsletter. (New York Branch). 10 (3).

Flugman, B., & Perin, D. (1986). Redirecting vocational training to the community college: A purchasable option for mildly handicapped consumers. In The New York Area Study Group on Transition, Reflections on transition: Model programs for youth with disabilities (pp 75-96). New York: Center for Advanced Study in Education, CUNY Graduate School.

Fradd, S., & Hallman, C.L. (1983). Implications of psychological and educational research for assessment and instruction of culturally and linguistically different students. Learning Disability Quarterly, 6, 468-478.

Gajar, A.H. (1987). Programming for college students with learning disabilities: A program development and service delivery guide for university service providers, diagnosticians, tutors, counselors, and learning disabled students. Columbus, OH: Association on Handicapped Student Service Programs in Postsecondary Education.

Gajar, A. (1989). A computer analysis of written language variables and a comparison of compositions written by university students with and without learning disabilities. Journal of Learning Disabilities, 22, 125-129.

Gajar, A., Salvia, J., Gajria, M. & Salvia, S. (1989). A comparison of intelligence achievement discrepancies between learning disabled and non-learning disabled college students. Learning Disabilities Research, 4, 119-124.

Garnett, K. (1985). Learning disabilities come of age: Transitions in adulthood. *Rehabilitation World*, 32-33.

Garnett, K., & LaPorta, S. (1984). *Dispelling the myths: College students and learning disabilities*. New York: Hunter College of the City University of New York.

Goodey, D. (1982). *Psychology of adjustment and the learning disabled student: Alternative techniques for teaching psychology to learning disabled students in the university*. Ellensburg, WA.: HELDS Project, Instructional Media Center, Central Washington University.

Goodman, J.F., Freed, B., & McMannus, W.J. (1988). The measurement of foreign language learning disabilities in college students. *Journal of Learning Disabilities*, *21*, 429-430.

Goodwin, S. (1985, July). *Academic adjustments for students with learning disabilities: two perspectives. Part I: Service providers*. Proceedings of The Association on Handicapped Students Service Programs in Post-Secondary Education Eighth Annual Conference, Atlanta, GA.

Graham, S., MacArthur, C. (1988). Improving learning disabled students' skills at revising essays produced on a word processor: Self-instructional strategy training. *The Journal of Special Education*, *22*, 133-152.

Greene, B. & Zimbler, L. (1989). Profile of handicapped students in postsecondary education, 1987. Washington DC: U.S. Department of Education Office of Educational Research and Improvement. CS 89-337.

Gregg, N. (1983). College learning disabled writers: Error patterns and instructional alternatives. *Journal of Learning Disabilities*, *16*, 334-338.

Gregg, N. & Hoy C. (1989). Coherence: The comprehension and production abilities of college writers who are normally achieving, learning disabled, and underprepared. *Journal of Learning Disabilities*, *22*, 370-371.

Guskey, T.R. (1986). Staff development and the process of teacher change. *Educational Researcher*, *15*, 5-12.

Hartman, R.C., & Krulwich, M.T. (1985). *Learning disabled adults in postsecondary education*. Washington, DC: HEATH Resource Center.

Higher Education and Adult Training for people with Handicaps (1987). *Learning disabled adults in postsecondary education*. Washington, DC: The National Clearinghouse on Postsecondary Education for Handicapped Individuals.

Hoffman, F.J., Sheldon, K.L., Minskoff, E.H., Sautter, S.W., Steidle, E.F., Baker, D.P., Bailey, M.B., & Echols, L.D. (1987). Needs of learning disabled adults. Journal of Learning Disabilities, 20, 43-52.

Houck, C.K. & Billingsley, B.S. (1989). Written expression of students with and without learning disabilities: Differences across the grades. Journal of Learning Disabilities, 22, 561-568.

Hull, G.A. (1989). Research on writing: Building a cognitive and social understanding of composing. In L.B. Resnick & L.E. Klopfer (Eds.) Toward the thinking curriculum: Current cognitive research. Washington, DC: ASCD.

Ingram, C., and Dettenmaier, L. (1987). LD college students and reading problems. Academic Therapy, 22, 513-519.

Jarrow, J.E. (1987). Integration of individuals with disabilities in higher education: A review of the literature. Journal of Postsecondary Education and Disability, 5, 38-57.

Johnson, D.J., & J.W. Blalock, J.W. (Eds.) (1987) Adults with learning disabilities: Clinical studies. Orlando, FL: Grune and Stratton.

Joint National Committee on Learning Disabilities (1987). Adults with learning disabilities: A call to action. Journal of Learning Disabilities, 20, 172-175. (Original work published 1985.)

Kavanagh, J.F. (1989). New federal biological definition of learning and attentional disorders. Perspectives on Dyslexia, 15, 5, 8.

Kitz, W.R., & Nash, R.T. (1986). Improving written expression skills of dyslexic students. Bulletin of the Association on Handicapped Student Service Programs in Postsecondary Education. 4, 89-96.

Landers, S. (1987, March). Researchers struggling to understand learning disabilities. The APA Monitor, pp 28-29.

Liberman, I.Y., Rubin, H., Duques, S.L., & Carlisle, J. (1985). Linguistic abilities and spelling proficiency in kindergartners and adult poor spellers. In D.B. Gray and J.F. Kavanagh (Eds.). Biobehavioral measures of dyslexia. Parkton, MD: York Press.

Lundberg, M., & Svien, K. (1988). Developing faculty understanding of college students with learning disabilities. Journal of Learning Disabilities, 21, 299-300, 306.

Mazur, S. (1989, Spring). Harmonizing content learning with communicative skills. Teaching at CUNY. New York: Professional Staff Congress and the Instructional Resources Center, City University of New York.

McGuire, J.M., Norlander, K.A., & Shaw, S.F. (1990). Postsecondary education for students with learning disabilities: Forecasting challenges for the future. Learning Disabilities Focus, 5, 69-74.

Miller, J.H. & Milam, C.P. (1987). Multiplication and division errors committed by learning disabled students. Learning Disabilities Research, 2, 119-122.

Michaels, C.A. (1988). From high school to college: Keys to success for students with learning disabilities. Albertson, NY: Human Resources Center.

Michaels, C.A. (Ed.) (1988). How to succeed in college: Handbook for students with learning disabilities. Albertson, NY: Human Resources Center.

Minskoff, H.M., Hawks, R., Steidle, E.F., & Hoffman, J. (1989). A homogeneous group of persons with learning disabilities: Adults with severe learning disabilities in vocational rehabilitation. Journal of Learning Disabilities, 22, 521-528.

Miramontes, O. (1987). Oral reading miscues of Hispanic students: Implications for assessment of learning disabilities. Journal of Learning Disabilities. 20, 627-632.

Murphy, L. (1986). Postsecondary education for LD students: A review. Paper presented at the Neurodevelopmental Center Conference, Toledo, OH. ERIC Document Reproduction No. 280201.

Nelson, R., & Lignugaris-Kraft, B. (1989). Postsecondary education for students with learning disabilities, Exceptional Children, 56, 246-265.

Nolting, P.D. (1988). Winning at math: Your guide to learning mathematics the quick and easy way. Pompano Beach, FL: Academic Success Press.

Office of Education and Research and Improvement, U.S. Department of Education Center for Statistics (1986). College level remediation. Washington, DC: U.S. Department of Education.

Office of Specialized Services, (1987). Access to higher education: Perspectives on students with disabilities. Ramapo, NJ: Ramapo College of New Jersey.

O'Hearn, C. (1989). Recognizing the learning disabled college writer. College English, 51, 294-304.

Perfetti, C.H. (1986). Continuities in reading acquisition, reading skill, and reading disability. Remedail and Special Education, 7, 11-21.

Perfetti, C.A. (1985). Reading ability. New York: Oxford University Press.

Perin, D. (1990). The transition from school to work of urban young adults with severe learning disabilities: A model demonstration. New York: Center for Advanced Study in Education, City University of New York, Graduate School.

Professional Staff Congress/City University of New York (1988). Reasonable accommodations. New York: Author.

Read, C., & Ruyter, L. (1985). Reading and spelling skills in adults of low literacy. Remedial and Special Education, 6, 43-52.

Reynolds, C.J., Hill, D.S., Swassing, R.H. & Ward, M.E. (1988). The effects of revision strategy instruction on the writing performance of students with learning disabilities. Journal of Learning Disabilities. 21, 540-545.

Rivera, D. & Smith, D.D. (1988). Using a demonstration strategy to teach midschool students with learning disabilities how to compute long division. Journal of Learning Disabilities, 21, 77-81.

Rosenthal, I. (1986). New directions for service delivery to learning disabled youth and young adults. Learning Disability Focus, 2, 28-29.

Ross, J.M. (1987). Learning disabled adults: Who are they and what do we do with them? Lifelong Learning, 11, 4-7.

Scheiber, B., & Talpers, J. (1985). Campus access for learning disabled students: A comprehensive guide. Washington, DC: The Parents' Campaign for Handicapped Children and Youth.

Scheiber, B., & Talpers, J. (1987). Unlocking potential: College and other choices for learning disabled people--A step-by-step guide. Bethesda, MD: Alder & Alder.

Seidenberg, P.L. (1986). Getting the gist: Relating text processing research to reading and writing instruction for learning disabled students. Brooklyn, NY: Long Island University Transition Project.

Siperstein, G.N. (1988). Students with learning disabilities in college the need for a programmatic approach to critical transitions. Journal of Learning Disabilities, 21, 431-546.

Smith, C. (1985, July). Part II. Student survey response. Proceedings of The Association of Handicapped Student Service Programs in Post-Secondary Education Eighth Annual Conference, Atlanta, GA.

Smith, J.O. (1988). Social and vocational problems of adults with learning disabilities: A review of the literature. Learning Disabilities Focus, 4, 46-58.

Spreen, O. (1988). Prognosis of learning disability. Journal of Consulting and Clinical Psychology, 56, 836-842.

Tindal, R., Parker, R. (1989). Assessment of written expression for students in compensatory and special education programs. *The Journal of Special Education*, *23*, 169-183.

Vellutino, F.R. (1987, April). Recent advances in the study of developmental dyslexia. *Scientific American.*

Vogel S. (1985). Syntactic complexity in written expression of LD college writers. *Annals of Dyslexia*, *35*, 137-157.

Vogel, S.A. (1986). Levels and patterns of intellectual functioning among learning disabled college students: Clinical and educational implications. *Journal of Learning Disabilities*, *19*, 71-79.

Vogel, S. (1987 a). Eligibility and identification considerations in postsecondary education: A new but old dilemma. In S. Vaughn and C.S. Bos (Eds.) *Research in learning disabilities: Issues and future directions* (pp. 121-137). Boston, MA: College-Hill.

Vogel, S. (1987b) Issues and concerns in LD college programming. In D.J. Johnson and J.W. Blalock (Eds.) *Adults with learning disabilities: Clinical studies.* Orlando, FL: Grune & Stratton.

Vogel, S., & Moran, M.R. (1982). Written language disorders in learning disabled college students. A preliminary report. In W.M. Cruickshank & J.W. Lerner (Eds.). *Coming of Age: Selected Papers from the 18th International Conference of the Association for Children and Adults with Learning Disabilities*. Syracuse, NY: Syracuse University Press.

Vogel, S. & Konrad, D. (1988). Characteristic written expressive language deficits of the learning disabled: Some general and specific intervention strategies. *Reading, Writing, and Learning Disabilities*, *4*, 89-99.

Wallace, W.G., Bott, D.A. (1989). Statement-pie: A strategy to improve the paragraph writing skills of adolescents with learning disabilities. *Journal of Learning Disabilities*, *22*, 541-553.

Wong, B.Y.L., & Wong, R. (1986). Study behavior as a function of metacognitive knowledge about critical task variables: An investigation of above average, average, and learning disabled readers. *Learning Disabilities Research*, *1*, 101-111.

Zavala, J., & Mims, J. (1983). Identification of learning disabled bilingual Hispanic students. *Learning Disability Quarterly*, *6*, 479-488.

Zwerlein, R., Smith, M., & Diffley, J. (1984). *Vocational rehabilitation for learning disabled adults*. Albertson, NY: Human Resources Center.

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